

1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF OREGON

3 IN RE: INTEL CORP. CPU ) Case No. 3:18-md-02828-SI  
4 MARKETING, SALES PRACTICES, )  
5 AND PRODUCTS LIABILITY )  
6 LITIGATION ) February 19, 2019

7 This Document Relates to All )  
8 Actions. ) Portland, Oregon  
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13  
14 (Motion Hearing)

15 TRANSCRIPT OF PROCEEDINGS

16 BEFORE THE HONORABLE MICHAEL H. SIMON

17 UNITED STATES DISTRICT COURT JUDGE  
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1 (February 19, 2019)

2 (P R O C E E D I N G S)

3 (Open court:)

4 THE CLERK: Your Honor, this is the time set for oral  
5 argument in MDL case 18-2828-SI, Intel Corp. CPU Marketing,  
6 Sales Practices, and Product Liability Litigation.

7 Could I have counsel in court, beginning with  
8 plaintiff, please identify yourself for the record.

9 MR. SEEGER: Good morning, Your Honor. Chris Seeger  
10 for plaintiffs. With me is Chris Ayers and Dave Buchanan from  
11 Seeger Weiss.

12 MS. RIVAS: Good morning, Your Honor. Rosemary Rivas  
13 for the plaintiffs.

14 THE COURT: Good morning.

15 THE CLERK: And for Intel.

16 MR. KATZ: Dan Katz on behalf of Intel Corporation.

17 THE COURT: Good morning.

18 MR. CHAPMAN: Good morning, Your Honor.

19 Thomas Chapman also for Intel.

20 THE COURT: Good morning.

21 MS. ALLEN: Good morning, Your Honor. Susanna Allen  
22 for Intel.

23 THE COURT: Good morning.

24 All right. We are here on two motions. I have read  
25 all of the pleadings. I have re-read the consolidated

1 complaint. I have read a number of the cases that both sides  
2 have cited. The motions before us are Defendant Intel's  
3 motion, or really corrected motion to dismiss, Docket 141. And  
4 relatedly, Intel's motion to take judicial notice, Docket 139.

5 I have no particular thoughts on the best way to  
6 proceed in this oral argument, and so I look forward to counsel  
7 telling me what you all think would be best. Let me tell you  
8 in terms of timing, I have allocated as much time for this  
9 argument as it reasonably needs. To the extent that you want  
10 to go past the lunch hour, I would like to take a modest,  
11 reasonable lunch break. To the extent that you think that it  
12 needs to go into the afternoon, I have a 30-minute criminal  
13 matter scheduled at 2:00 p.m.

14 Is that right, Mary, and is that still on?

15 THE CLERK: Yes.

16 THE COURT: Okay. Then I'll have to make sure I can  
17 handle from 2:00 to 2:30. If you don't want to take that long,  
18 you don't have to.

19 But how do you all think would be the best way to  
20 proceed? Let me start by asking the movant.

21 Mr. Katz.

22 MR. KATZ: Your Honor, frankly, depending on the  
23 Court's questioning, I wouldn't think that we would have to go  
24 past the lunch break. I'm prepared to proceed now.

25 THE COURT: That's fine. You certainly don't need to

1 repeat everything that is in the briefs, because I have read  
2 all of the briefs several times. But that said, I look forward  
3 to your arguments.

4 Mr. Seeger or Ms. Rivas, is there anything that  
5 either of you wish to say very briefly before we begin with the  
6 substance of the arguments?

7 MR. SEEGER: I think for the plaintiffs' side of it,  
8 we probably would need 40 minutes together, depending on what  
9 Mr. Katz says.

10 THE COURT: All right. Well, take what you need. I  
11 do urge everyone to speak slowly, and I look forward to your  
12 comments.

13 Mr. Katz.

14 MR. KATZ: Thank you, Your Honor.

15 Now that plaintiffs have abandoned their affirmative  
16 misrepresentations claims, this case presents an even more  
17 compelling case for dismissal than the similar cases that were  
18 brought against AMD and Apple.

19 I want to start with standing, Your Honor. First,  
20 with the basics: Standing, of course, requires the plaintiffs  
21 to plead a concrete and particularized injury as to themselves,  
22 but in this case not a single one pleads an actual or imminent  
23 hack, any market value decline of their devices, discontinued  
24 use of their devices, or any specific performance impact.

25 The standing in this case is based on alleged

1 overpayment at the time of sale. In other words -- and I think  
2 critically for this entire argument, it is based on a loss of  
3 benefit of the bargain here. So, of course, Cahen is the key  
4 Ninth Circuit case. Legally and factually, it's on all fours  
5 with this one because plaintiffs alleged overpayment for a  
6 defective computer system in their vehicles that they alleged  
7 was vulnerable to malicious hacking; and like here, the  
8 potential hack was only demonstrated in a controlled  
9 environment.

10           The Court held in that case that the injury was  
11 speculative. There were no allegations to support any market  
12 value decline, like lower Kelley Blue Book values or product  
13 recall. There was no allegation that any plaintiffs had been  
14 forced to discontinue using their vehicles. The Ninth Circuit  
15 noted, of critical importance, that the alleged defect impacted  
16 nearly 100 percent of the cars on the market. Of course, in  
17 this case it is indisputable that the entire market has been  
18 impacted. In the cases against AMD and Apple, the chips there,  
19 like here, are all alleged to be unmerchantable.

20           THE COURT: How would that analysis fare under the  
21 Eighth Circuit's opinion in Kuhns? I don't know if you are  
22 familiar with Kuhns v. Scottrade. That was essentially like a  
23 database problem. In that case, on standing, the  
24 Eighth Circuit said that Kuhns alleged that a bargained for and  
25 expected protection of his personal identifying information;

1 that Scottrade breached the contract when it failed to provide  
2 promised reasonable safeguards; and that Kuhns suffered actual  
3 injury in the diminished value of his bargain.

4 Then it goes on to say, "Whatever the merits of  
5 Kuhns' contract claim and his related claims for breach of  
6 implied contract and unjust enrichment, he has Article III  
7 standing to assert them."

8 That's Kuhns v. Scottrade at 868 F.3d 711 at 716.  
9 That's an Eighth Circuit decision from 2017.

10 MR. KATZ: Well, first of all, of course, Your Honor,  
11 Cahen, that analysis is the controlling case. And second, what  
12 I would say is that case is not applicable here because you are  
13 not dealing with a product defect case. There are multiple  
14 cases that we cite that say that there is no defect here  
15 because of the way it's defined, such as Lassen v. Nissan that  
16 involved the same overpayment theory as here. It is based on a  
17 defective product design.

18 THE COURT: But now you are getting into the merits  
19 of the case, right? And that may very well be a persuasive  
20 12(b)(6) argument or elsewhere, but they said, based upon what  
21 they obtained, what they purchased, that they've not gotten the  
22 benefit of their bargain. There is unjust enrichment to the  
23 defendant. That's what they allege. We will talk about it  
24 soon enough on the 12(b)(6).

25 But why isn't that sufficient for standing?

1 MR. KATZ: Your Honor, the Lassen v. Nissan case is a  
2 standing case. Birdsong is to the same effect, which is the  
3 controlling Ninth Circuit authority, one of the seminal cases.  
4 There, the plaintiffs alleged that they had standing because  
5 there was lack of an iPod safety feature and that was part of  
6 their benefit of the bargain.

7 But the Ninth Circuit held that that loss, under  
8 Ninth Circuit law, is hypothetical because it was alleged as to  
9 the plaintiffs themselves that they suffered a hearing loss,  
10 but more importantly, an additional safety feature wasn't part  
11 of the bargain to begin with. So that was considered not a  
12 merits question. It was considered a standing question. And  
13 the case was thrown out on that basis.

14 Lassen is to the same effect. There is no basis to  
15 assert that consumers bargained for an additional safety  
16 feature. Therefore, the case was dismissed based on standing.

17 THE COURT: And that's what I'm having a difficulty  
18 following, because I understand the argument that the consumers  
19 didn't bargain for a safety feature, but that seems to me a  
20 merits argument. Maybe it is addressed at 12(b)(6); maybe it  
21 can be dealt with on plausibility issues. But I don't  
22 understand why that allegation is sufficient for standing.

23 What really is the teaching from Lassen and Birdsong  
24 on that point?

25 MR. KATZ: On that point it's that you take a



1 situation, just like you said in the Eighth Circuit, where the  
2 consumer comes in and says, "Look, you can play this for  
3 extended periods of time at very high volume, and that subjects  
4 us to a real risk of hearing loss, and you should have designed  
5 the product differently, because that was part of the bargain  
6 under a benefit-of-the-bargain theory. We wouldn't have bought  
7 it or we would have paid less."

8           The Ninth Circuit said that that does not get you  
9 over the bar for standing, because there is no evidence that  
10 you bargained for that particular feature. We will talk later  
11 about what that means in terms of a no-harm product liability  
12 case. But consistently, at least in the Ninth Circuit, these  
13 issues have been addressed in the standing context.

14           I would also cite the Court to the case of Azoulai v.  
15 BMW, which is a Northern District case from 2017. That case  
16 applied Birdsong and Lassen and said that there was no standing  
17 relating to BMW's automatic door-shutting feature, even though  
18 all plaintiffs in that case had their fingers literally crushed  
19 in the BMW doors.

20           The Court said that lack of a sensor was not part of  
21 the bargain. What you have there is an effort to recast a  
22 no-harm product liability case into a consumer fraud case, and  
23 you can't seek benefit-of-the-bargain damages. You don't have  
24 standing because there is no bargaining for that additional  
25 safety feature.

1           Now, what the Court said is they could have pled  
2 standing if they pled that they were physically injured,  
3 because they have manifest physical injuries. But what all of  
4 those cases stand for in the Ninth Circuit is that you actually  
5 don't have standing if you haven't pled a plausible defect.  
6 The Ninth Circuit and the District Courts have been very  
7 vigilant about that, when you take a no-harm product liability  
8 case and try to convert it into a benefit-of-the-bargain case.

9           You have to remember here, Your Honor, it is even  
10 more extreme, because the plaintiffs say that this defect has  
11 existed since 1995. That's in paragraph 4 of their complaint  
12 and the opposition at 3. So what they say, "We don't like your  
13 product design. You should have been at a different place on  
14 the continuum between safety and security. We haven't suffered  
15 any tangible injury."

16           They are suing for people who bought in 2006 and  
17 dumped their computer in a landfill in 2011. That's the very  
18 essence of a claim where no one has suffered concrete harm.  
19 Birdsong is just a continuation of all the Supreme Court  
20 precedent, leading up to, of course, Spokeo and Clapper that  
21 you have to really allege a palpable injury.

22           You cited a database case that I would submit is not  
23 consistent with Birdsong, if interpreted that way, but also I  
24 think it is important to recognize what it is that the  
25 plaintiffs are claiming. They're saying that their case isn't

1 based on any fear of an actual hack. They say that their case  
2 isn't based on whether or to what extent any particular  
3 plaintiff was impacted in terms of performance. It's based  
4 purely on their contention that since 1995 that they don't like  
5 Intel's product design and Intel should have made a different  
6 decision on that continuum.

7 So at least all of the cases I cited to you,  
8 including Birdsong, Lassen, and Azoulai treat this as a  
9 standing issue, and I think this Court should do the same.

10 I also think that Judge Davila got it right in  
11 In re Apple Processor, because he applied Cahen to say there's  
12 no injury in fact. There was no allegation in that case, just  
13 like here, about the decline of value of iDevices. There is no  
14 allegation about any plaintiff discontinuing using the device.  
15 There is nothing about any plaintiff personally experiencing  
16 specifically any performance impact.

17 I would submit to you that this case is even more  
18 compelling for dismissal because the plaintiffs expressly state  
19 to the Court in their opposition at page 12 that they are not  
20 basing their case on the performance impact of any patches.

21 In keeping with that approach, Your Honor, 94 of 95  
22 plaintiffs in this case say absolutely nothing about the  
23 performance impact whatsoever. Only one -- that's  
24 DK Systems -- does so vaguely.

25 So here, I think it is even more extreme than that,

1 Your Honor, from a standing perspective because the plaintiffs  
2 actually plead facts that negate any price impact from the  
3 disclosure of the vulnerability. Five plaintiffs bought in  
4 2018, and they don't allege that they paid less. They allege  
5 that after all of the information was in the public domain  
6 starting on January 2nd, that they actually overpaid,  
7 completely negating any allegation that there was harm here.

8 With respect to the plaintiffs' cases, Your Honor,  
9 that they cite and principally rely on for standing, they are  
10 dealing with cases where the products have actually  
11 malfunctioned, and there is some nonspeculative injury; for  
12 example, In Re: Toyota Unintended Acceleration. In that case  
13 you are talking about specific allegations of unintended  
14 acceleration. So the product was not operating as designed.  
15 It led to fatal accidents, recalls, lower Kelley Blue Book  
16 values. That's the sort of case where there is clearly  
17 standing.

18 None of that is pled here. When you look at the  
19 facts in these cases and the lengths that the plaintiffs went  
20 to plead concrete injury: 17,900 cases reported, even five  
21 Toyota mechanics, recalls, fines by the National Highway  
22 Transportation & Safety Board to the tune of \$16.4 million.  
23 None of that is true here.

24 The In Re Chrysler Gearshift case is another case  
25 they cite, where the car wouldn't properly go into park, and

1 that led to 300 complaints of cars moving unattended, at least  
2 one death, many injuries, recalls, extreme depreciation.  
3 That's the stuff of which standing is made.

4           The case that they principally rely on, Your Honor,  
5 in addition to the car cases, is Hinojas v. Kohl's, a  
6 Ninth Circuit case which I'm sure you are familiar with from  
7 2013, that predated Cahen. That case is completely  
8 distinguishable, because, first of all, it is not a product  
9 defect case. Second of all, it involved a fabricated price, an  
10 economic injury, that the Cahen court said was not speculative  
11 and directly ascertainable. That was in fact the  
12 District Court decision.

13           Your Honor, unless you have any further questions on  
14 standing, I'll move on to implied warranty, but I think the law  
15 is quite clear in the Ninth Circuit. I think Judge Davila got  
16 it right. I think it is on all fours with Cahen for all the  
17 reasons I said, including the market-wide impact; the  
18 speculative harm; no allegation of market impact; and actually  
19 allegations that negate market impact since, once the  
20 information was out there, people are saying they still  
21 overpaid.

22           I would also highlight to the Court, not only are  
23 there five people who bought in 2018, there are two people who  
24 are named plaintiffs who bought after they filed suit, after  
25 having advice of counsel, after saying, "We wouldn't have

1 bought a device with an Intel processor, or we would have paid  
2 less." They still buy and come in and say they still overpaid.  
3 I think that's very, very important for the Court to keep in  
4 mind in assessing the complaint that has been brought.

5           Regarding the implied warranty claim, first of all, I  
6 know that Judge Koh didn't reach this and the Hauck case went  
7 right to merchantability, but there is no vertical privity  
8 here.

9           THE COURT: By the way, I know that one of the  
10 responses to the question I'm about to ask is they didn't plead  
11 third-party beneficiary. They didn't; I get that. If they  
12 had, isn't the direction that at least California law is going  
13 on vertical privity to be more open to arguments of third-party  
14 beneficiary claims, at least when it is pled?

15           MR. KATZ: I don't think that's right, Your Honor.  
16 The way I would respond to it is this: There are some federal  
17 District Court cases, and I think those are the cases that you  
18 may be referring to, that indicate that there is a third-party  
19 beneficiary exception. However, I would cite the Court to  
20 In re Seagate Tech., a Northern District case from 2017. The  
21 Court there said that no California case has applied a  
22 third-party beneficiary exception to a consumer claim against a  
23 product manufacturer.

24           And we searched for one, Your Honor, and did not find  
25 any California Court of Appeals case, and certainly no

1 California Supreme Court case, that applied it in that fashion.  
2 The In re Seagate court said that it would be hard to imagine a  
3 more thorough nullification of the Clemens case than that.

4 THE COURT: Although what was the product in Seagate?  
5 I thought that's where the manufacturer supplied to a dealer  
6 who then sold to the consumer; whereas here we have a  
7 manufacturer of a component selling to a manufacturer of a  
8 computer who then sells to the consumer.

9 Is that difference to a third-party beneficiary  
10 analysis?

11 MR. KATZ: I don't think that's a difference.  
12 Your Honor, I would say, here, many of the plaintiffs are two  
13 steps removed, because of Intel selling to HP, selling to  
14 Best Buy, selling to a consumer, so a two step --

15 THE COURT: But the third-party beneficiary analysis  
16 would run from Intel to the assembler and manufacturer of the  
17 computer?

18 MR. KATZ: Right. And I don't think it makes  
19 particularly any difference that there is another step in the  
20 chain. But I think what is important is that Clemens from  
21 2008, which I know Your Honor is familiar with, that was  
22 obviously a consumer purchasing a car from a dealer and was  
23 held not to be in privity with the manufacturer.

24 The Ninth Circuit said that the California courts  
25 have painstakingly set out the exceptions to the privity

1 requirement, and certainly a third-party beneficiary exception  
2 specifically wasn't one of them.

3           Where this all emanates from, where the District  
4 Courts say there is such an exception, they get from Gilbert  
5 Financial, which is a Court of Appeals case from '78. That  
6 involved a roofing subcontractor that stepped into the shoes of  
7 the general contractor for the part of the project that related  
8 to the roof, and it was held that you could maintain a claim  
9 against the subcontractor, but interestingly the Court said in  
10 that case that it didn't need to decide the issue of privity  
11 per se in that case because there was such a direct contractual  
12 connection between the subcontractor and the homeowner.

13           THE COURT: It's probably an unfair question, but if  
14 you are right on the requirement of privity and it is that  
15 clear, why didn't Judge Koh address it in Hauck v. AMD?

16           MR. KATZ: The reason why she may not have addressed  
17 it, just from reading her opinion, Your Honor, is because it is  
18 just so clear in this case that there's no breach of the  
19 implied warranty of merchantability; that it is such a  
20 slam-dunk decision that she just went right to it and didn't  
21 address the privity requirement.

22           THE COURT: And I assume you feel the same way in  
23 this case?

24           MR. KATZ: I do. I'll address that in a minute. I  
25 just want to make a couple more quick points about privity.



1 Let's even assume the exception applied. Aside from the  
2 plaintiffs not saying specifically in their complaint that they  
3 are relying on a third-party beneficiary exception, they at  
4 least would have to plead what contract they claim they're the  
5 beneficiaries.

6 They cite the case *In re Carrier IQ* from the  
7 Northern District in 2015, and that implied warranty claim was  
8 dismissed because nothing was alleged about an underlying  
9 contract. The cases that they rely on for their privity  
10 argument, they say because Intel was marketing, that's what  
11 created the privity. But the cases that they cite don't say  
12 that, like *Luong v. Subaru*, Northern District from 2018, that  
13 was a case where the plaintiffs alleged that Subaru was the  
14 direct seller. Because they made the allegation that Subaru  
15 was the direct seller, the Court said, "We're not going to  
16 dismiss it on the grounds of privity."

17 In the *Cardinal Health* case, that was, again, a very  
18 specific contractual situation where Tyco was a successor  
19 corporation. It was held that Tyco succeeded to the  
20 predecessor; and therefore, there was a contractual  
21 relationship and the link wasn't broken by the sale of a  
22 business. But that's far afield from what we have here

23 THE COURT: Is it really far afield? Here is what  
24 I'm thinking. I don't watch television that much, but when I  
25 do, I do notice some of these Intel commercials. Since I can't

1 carry a tune, I can't do that little jingle. But I know they  
2 are marketing directly to consumers to want to select a  
3 computer that has Intel inside. They put the label on there so  
4 that the consumer will know whether they are or are not getting  
5 a computer with Intel inside. So even though they are not  
6 selling processors to end-users, they sure look like they are  
7 marketing.

8 What's the implication of that?

9 MR. KATZ: Certainly Intel is marketing. I would  
10 agree with you, and I would concede that. But I really don't  
11 think that that plays into the vertical privity analysis. I  
12 haven't seen any case. I haven't even seen a District Court  
13 case that said simply because you market, that would create  
14 privity; that that's part of the analysis.

15 Even the District Court cases that say there's a  
16 third-party beneficiary exception, at least require, like  
17 In re Carrier IQ, that you point to a specific contract. I  
18 don't think just simply by marketing and ads being put out  
19 there that you then blow through the privity requirement. I  
20 would say if that was the case, then there is really nothing  
21 left whatsoever of Clemens v. DaimlerChrysler.

22 I would come back to that, in Clemens, it did  
23 painstakingly lay out the exceptions recognized by the  
24 California courts, third-party beneficiaries is one of them,  
25 and as I said, Your Honor, I was not able to locate any case

1 where there is a California state court that says that that's  
2 one of the exceptions.

3 THE COURT: But Clemens didn't address a situation of  
4 a manufacturer marketing directly to the consumer, and I wonder  
5 if that is another basis to find an exception to vertical  
6 privity requirements.

7 MR. KATZ: Well, you're talking about, in Clemens v.  
8 DaimlerChrysler, a car manufacturer, and there are a lot of car  
9 cases. Car manufacturers certainly are all over the airwaves  
10 advertising to consumers. Clemens said that a consumer  
11 purchasing a car from a dealer is not in privity with the  
12 manufacturer. So I think that that would have been apparent,  
13 and I haven't seen any case citing advertising as the linchpin  
14 of the analysis.

15 Moving on to the merchantability, the standard is  
16 that the product has to lack even the most basic degree of  
17 fitness for ordinary use. That's Birdsong.

18 Hauck said, and I think this is important,  
19 Your Honor, that the alleged defect in that case -- and  
20 Judge Koh analyzed, whether it is 20 years of serious security  
21 vulnerabilities, whether it is vulnerabilities created by AMD's  
22 design, which is the same as our case, or Spectre, there is no  
23 allegation that there is a compromise of safety; that  
24 processors are rendered inoperable; that functionality is  
25 drastically reduced.

1           Judge Koh specifically analyzed a 5 to 30 percent  
2 slowdown after patching and said that that doesn't render the  
3 processors unfit for their ordinary purpose. The complaint  
4 here at paragraphs 298, 303, and 306 also cite this same up to  
5 30 percent impact.

6           But I think it is also critical, Your Honor, to note,  
7 in addition to Judge Koh's analysis, think about it: The  
8 alleged defect here has existed since 1995. So the implied  
9 warranty standard can't possibly be met. I don't see how it  
10 can be seriously contended that the defect, as defined in this  
11 case, that since 1995 that all Intel processors have lacked  
12 even the most basic degree of fitness for ordinary use; that  
13 the processors all that time have been computing properly; all  
14 that time there has been no hack reported.

15           How can it be said that they lack even the most basic  
16 degree of fitness? I would go even further and say, with  
17 respect to the defect and the vulnerability, there hadn't even  
18 been any kind of proof of concept demonstrated in a lab to  
19 maliciously exploit speculative execution.

20           As for the named plaintiffs bringing it up to the  
21 present time, we are batting 95 for 95 on continued use because  
22 all of them say that they applied a patch, plus you have five  
23 plaintiffs, including two with advice of counsel, buying in  
24 2018. I would submit that it defies common sense to think that  
25 consumers are buying products after knowing that they are going

1 to be patched and knowing there are these vulnerabilities, that  
2 somehow they are buying a product that lacks even the most  
3 basic degree of fitness for ordinary use.

4           We cite other multiple cases that show that there is  
5 a very high bar set on the implied warranty of merchantability.  
6 It means not even meeting the minimum standard of quality.  
7 Kent v. Hewlett-Packard, a motion to dismiss, they're  
8 frequently granted. Just like Judge Koh granted the motion to  
9 dismiss, it was granted in Kent v. Hewlett-Packard for a laptop  
10 that routinely locked up, froze on a cold boot, because there  
11 was no data lost, and there was no allegation that anyone was  
12 forced to stop using the computer.

13           Baltazar v. Apple is another example from the  
14 Northern District where a motion to dismiss was granted, and it  
15 was alleged that outside, in the sunlight, iPads overheated and  
16 shut down. The Court held that they're not unfit for use  
17 anywhere.

18           So what I would lastly emphasize about  
19 merchantability about the clear and sharp distinction between  
20 the analysis that Judge Koh went through in Hauck and those  
21 other cases that I just discussed and the plaintiffs' cases,  
22 they are all cases where the product drastically malfunctioned  
23 or completely failed, like In re Nexus 6P Products Liability.  
24 That's one of their featured cases. There was a total failure  
25 of those phones. There was data lost. It was alleged in the

1 complaint that the phone is essentially an expensive  
2 paperweight. You don't have anything like that here.

3 In re Carrier IQ was a software installed by phone  
4 carriers that actively transmitted in realtime, even when not  
5 using the network, while using a WiFi network, data readable by  
6 third parties in unencrypted form operating a hundred percent  
7 of the time.

8 Isip v. Mercedes-Benz, another case that they cite.  
9 That's a car that smells, lurches, clanks, emits noise over an  
10 extended period of time. I agree that just because a car will  
11 go from point A to point B doesn't mean it's basically fit.  
12 But if there is a severe malfunction like that, such that no  
13 reasonable person is going to use it -- another example that's  
14 given is a bed with mold. You can still sleep in it, but  
15 no one wants to sleep in a bed with mold. That makes sense.

16 They also cite Roberts v. Electrolux; that lint  
17 accumulation in a dryer can cause fires. Maybe it will still  
18 dry clothes, but it will really dry them. It might burn them  
19 up. But we are obviously not talking about anything like that  
20 here.

21 So Judge Koh analyzed it from every angle no  
22 matter -- she had some difficulty about exactly what the defect  
23 was, but analyzed the situation we have here, a defect that  
24 goes back 20 years, and it relates to the design of the  
25 processor; it's not as secure as it is supposed to be. Clearly

1 Intel's processors are fit for use, and all of the plaintiffs  
2 here demonstrate that.

3           Going to duty to disclose, Your Honor -- if we get by  
4 standing, that's a central issue in the case. I would like to  
5 go into a little more detail about Wilson v. Hewlett-Packard  
6 because there is the contention that Wilson v. Hewlett-Packard  
7 is not good law anymore in the Ninth Circuit related to the  
8 standard for a duty to disclose at the threshold level.

9           Of course, in Wilson v. Hewlett-Packard, there's no  
10 duty to disclose in a pure omission case unless there is an  
11 unreasonable safety hazard. I would like to review with the  
12 Court why Wilson is clearly still good law and binding on this  
13 Court.

14           THE COURT: You're certainly welcome to do that, but  
15 I've read Hodsdon a few times, and there seems to be reluctance  
16 by the Ninth Circuit to unabashedly confirm that Wilson is  
17 still good law. So I assume that after you tell me why Wilson  
18 is still good law, you'll give me an alternative argument.

19           MR. KATZ: I will. In fact, Your Honor, I don't want  
20 to be defensive about it. I'll explain why this Court is bound  
21 by Wilson, but I also think that they don't come within a  
22 country mile of proving that there is a central functional  
23 defect in Intel processors that goes back to 1995.

24           THE COURT: And that strikes me as an easier argument  
25 for you to make than the argument that either I'm bound by

1 Wilson or Wilson is still good law, especially after Hodsdon.  
2 But you are welcome to make both.

3 MR. KATZ: I want to take a quick crack at it, if  
4 that's okay.

5 THE COURT: Of course.

6 MR. KATZ: First of all, Your Honor, Hodsdon  
7 explicitly said that we have no occasion in this case to  
8 consider whether later state court cases have effectively  
9 overruled Wilson.

10 They said that what they are going to proceed to do  
11 is apply plaintiffs' test of central functional defect. The  
12 Court went on to say that, of course, plaintiff couldn't state  
13 a claim, because whether there is human trafficking in the  
14 supply chain, as reprehensible as that is, it is not a central  
15 functional defect of a chocolate bar.

16 So, first of all, Your Honor, a Ninth Circuit panel  
17 can't overturn the decision of a previous Ninth Circuit panel,  
18 unless it's clearly inconsistent with intervening higher  
19 authority.

20 Collins and Rutledge, which are the two cases we are  
21 talking about, are not intervening higher authority for two  
22 reasons: First of all, Hodsdon itself noted that with respect  
23 to the six District Courts of Appeal, they don't even bind each  
24 other, and they are certainly not binding on the Ninth Circuit.

25 And second, post-Rutledge, which is second in time of



1 the two cases. That's a 2015 case. Collins v. eMachines is  
2 2011. The Ninth Circuit twice reaffirmed the Wilson standard.  
3 Daniel v. Ford Motor Company in 2015, which was about five  
4 months after Rutledge, said that Wilson's safety hazard is  
5 still the standard.

6 THE COURT: Was that published or unpublished?

7 MR. KATZ: I believe it is a published decision.  
8 Daniel v. Ford Motor Company is cited by both us and the  
9 plaintiffs. It is a published decision that also talks about  
10 how there are two sub-elements of reliance, a later argument.  
11 Then in 2017, in Williams v. Yamaha, the Ninth Circuit again  
12 reaffirmed Wilson v. Safety Hazard Standards. So, therefore,  
13 Rutledge isn't an intervening authority of any kind.

14 Then, also, Your Honor, taking two of plaintiffs'  
15 cases, Sloan v. General Motors, the Northern District in  
16 2017 -- that's cited in the opposition at 8. The Court there  
17 held it was bound to follow Wilson and not Rutledge, noting  
18 that Williams v. Yamaha postdated Rutledge.

19 In addition, the plaintiffs cite Lusson v. Apple in  
20 their opposition at page 36. The District Court there said  
21 that the Court is bound by Wilson Safety Hazard until the  
22 California Supreme Court clearly states that the law is  
23 otherwise.

24 So what I think it takes, Your Honor, for this Court  
25 not to be bound by Wilson is either a decision of the

1 California Supreme Court, or, of course, en banc Ninth Circuit  
2 or U.S. Supreme Court. Otherwise, the Wilson standard of  
3 safety hazard is still the law here.

4 Also, very briefly, before I turn to central  
5 functional defect, there are a few other things that I think  
6 the Court should consider. First of all, Hodsdon itself said  
7 that Collins and Rutledge are somewhat vague about the tests  
8 for determining whether a defendant has a duty to disclose  
9 under what circumstances.

10 Hodsdon noted that Rutledge can be interpreted to  
11 mean any one of three different things. That's how clear it  
12 was. One of the things is that if there is a central  
13 functional defect, that that standard only applies if the  
14 defect arises within the warranty period.

15 Hodsdon read Collins as standing for the proposition  
16 only that central functional defect applies within the warranty  
17 period. Of course, we are not dealing with a warranty here.  
18 So for that reason, the central functional defect, if Rutledge  
19 is read that way, it doesn't apply.

20 In addition --

21 THE COURT: Although I assume we're now going to turn  
22 to there's no central functional defect here. But if there  
23 were, whatever that might mean, but if there were, it would be  
24 present from the moment the product is sold, which is within  
25 the warranty period.

1           MR. KATZ: The plaintiffs are not relying on that.  
2 There is no express warranty here --

3           THE COURT: Right.

4           MR. KATZ: -- to plaintiffs.

5           THE COURT: Right. I just don't think that aspect of  
6 Rutledge is really where the guts of this dispute is.

7           MR. KATZ: Yeah, I think that's right, Your Honor.  
8 But I'd also say that I think there are really good policy  
9 reasons to follow the safety hazard standard. Daugherty v.  
10 American Honda has been a very seminal case. That's the case  
11 that Wilson relied on and articulated a policy reasons behind  
12 the safety hazards standard.

13           Another case, Bardin, which is relied on by the  
14 Ninth Circuit in Hodsdon, also articulates why it is important  
15 to have a very high bar on duty to disclose, and I'm going to  
16 get to that in a minute with respect to central functional  
17 defect, because California, of course, has no broad obligation  
18 to disclose.

19           And in a pure omission case, what Wilson discusses  
20 and what Bardin discusses, and what Daugherty discusses is that  
21 broadening the duty to disclose will eviscerate the limitations  
22 imposed by product liability law and warranty law and  
23 essentially make warranties perpetual; that the issue of safety  
24 hazard, that's something that is dealt with at the product  
25 liability law level because it is imposing strict liability on

1 a manufacturer to take care not to injure people.

2 But in the consumer fraud context, we only have a  
3 limited duty to disclose. And the reason for that, especially  
4 in a design defect case like this, there's no limiting  
5 principle on it, Your Honor. I mean, what would Intel have to  
6 disclose? Every time they make a design decision, where  
7 they're finely calibrating on the speed security continuum --

8 THE COURT: And you know that's one of the questions  
9 I'm going to ask plaintiffs' counsel.

10 MR. KATZ: And it is something that the Ninth Circuit  
11 and the California Court of Appeals was very, very concerned  
12 with, in setting that line, in Daugherty and Bardin. I mean,  
13 Bardin was a case that said that we can recover under consumer  
14 fraud law because Chrysler installed an exhaust system made out  
15 of tubular steel instead of cast iron, and the tubular steel  
16 was inferior, less durable, less expensive, and unlikely to  
17 last the useful life of the car.

18 Of course, the Court there held, and Hodsdon cited it  
19 with approval in discussing the unfair prong of the UCL that  
20 you don't have a case, and granted a motion to dismiss because  
21 you didn't bargain for any particular type of steel to be used  
22 in the exhaust system.

23 I think that that case is on all fours with this one  
24 here because there was no warranty. Chrysler made no  
25 representations about the durability of the exhaust system,

1 just like the plaintiffs here aren't relying on any affirmative  
2 misrepresentation, which I think is very key here that they're  
3 proceeding on a pure omission theory.

4           So with respect to central functional defect, the  
5 standard is that the product essentially must be incapable of  
6 use by any consumer, like a computer chip that corrupts a hard  
7 drive or a laptop screen that goes dark. And, of course, where  
8 Hodsdon got those examples were directly from Rutledge, the  
9 computer chip that corrupts the hard drive; and, in Collins,  
10 the laptop screen that goes dark.

11           So I think when the Ninth Circuit talks about a  
12 defect that impairs a product to the extent that it is  
13 incapable of use by any consumer, what they're talking about is  
14 that we are going to look at what the defect does to the  
15 product in an overall fashion.

16           For example, you could see a case where, just like in  
17 the implied warranty context -- let's say an air conditioner;  
18 you can't stop it from emitting mold. That car is going to be  
19 incapable of use, even though one might argue that an air  
20 conditioner isn't like the central function of a car.

21           I would say that if you look at the cases,  
22 particularly Judge Koh's analysis in Hauck, the language used  
23 in discussing central functional defect is a lot like the  
24 language that's used in discussing implied warranty. And it  
25 has to be a very high bar, because the policy considerations

1 that I just discussed that are set out in Daugherty and Wilson  
2 still apply. Even if it is central functional defect, it has  
3 to be a very high bar. So why can't the test possibly be met  
4 here?

5           Again, Your Honor, this defect is alleged to exist  
6 since 1995. So we are saying that Intel processors, since  
7 1995, have been incapable of use by any consumer? There's no  
8 allegation that any data was corrupted. There is no allegation  
9 that they didn't compute properly. There is no allegation that  
10 anybody hacked; that any type of hack had even been developed;  
11 even a proof of concept in a lab with respect to the defect as  
12 they define it here.

13           THE COURT: Let me ask you this: It is probably  
14 hypothetical -- at least we don't have any evidence in this  
15 case yet -- although it may or may not be consistent with some  
16 allegations. Let's assume that there was a design feature put  
17 in in 1995 that the designer assumed would never cause a  
18 problem because there is no way that anyone would have a key to  
19 exploit it.

20           Then technology advances, and 25 years later someone  
21 develops a key to exploit it and that makes -- this is where we  
22 are really going to get very hypothetical and probably  
23 counter-factual, but that now makes it very unsafe to use this  
24 product, to use the processor, because the key has now been  
25 developed.

1           The fact that it has been in existence since 1995  
2 doesn't mean that we don't have a serious defect. I mean, we  
3 just didn't have a defect that could be exploited until now.  
4 But now that the key has been developed 25 years after the  
5 product was introduced, that would make the product inoperable.  
6 I know you're going to say, "This is not inoperable." And  
7 that's why this is a hypothetical.

8           But doesn't the fact that 25 years later this key has  
9 now been developed that can make the product inoperable mean  
10 that something that wasn't a defect when it first came out 25  
11 years ago now is?

12           MR. KATZ: I think you have to judge it by what  
13 decisions were being made at the time that the product is  
14 developed, and maybe you'll revisit that decision.

15           No, I don't think that is the right analysis. I  
16 think the analysis is the manufacturer making a reasonable  
17 design choice. And when they are making the reasonable design  
18 choice, is it foreseeable that the product -- because of  
19 that -- is going to drastically malfunction or completely fail?  
20 I think that's what you're positing, and that's the kind of  
21 case that they cite. If you're positing that the design is  
22 developed at a time when you know that it is going to be very  
23 simple for people to hack and you're not going to have any  
24 security whatsoever, such that the product is malfunctioning,  
25 then you are in "central functional defect" land.

1           But if a manufacturer is making a design decision to  
2 balance security and speed, like Intel did here in a certain  
3 way, the courts are very clear in the Ninth Circuit that that's  
4 not actionable.

5           The Bardin v. DaimlerChrysler is cited in Hodsdon.  
6 The design choice, even though when Chrysler baked in tubular  
7 steel into an exhaust system, they knew that it wouldn't be as  
8 durable. They knew that it was likely to fail arguably within  
9 the useful life of the car. But the Court said that design  
10 decision is one for Chrysler to make, and so you can't recast a  
11 no product liability/no injury case into a consumer fraud case.  
12 I'm not sure if that's what you are trying to posit. I think  
13 there's a big difference.

14           So the cases they cite, they are all cases where the  
15 product either completely failed or drastically malfunctioned  
16 again; the same infirmity in their analysis in the implied  
17 warranty context. Their featured case is Beyer v. Symantec  
18 from the Northern District in 2018. But in that case you are  
19 talking about Norton Symantec software, where the only purpose  
20 was security. It was alleged that the product ab initio  
21 drastically malfunctioned, including causing data corruption.  
22 And on top of that, the product actually made the computer less  
23 secure. So that's a reasonable decision by Judge Chen to let  
24 that go forward.

25           The Norcia v. Samsung case, a very short decision,



1 they also rely on. That actually involved affirmative  
2 misrepresentation, despite the fact that it was labeled an  
3 omission case. That was one where Samsung allegedly programmed  
4 the phones to fool benchmarking apps. and overstate the  
5 performance. That was the misrepresentation side of the case,  
6 so that basically the product didn't work as represented. We  
7 are not talking about that here when we are talking about a  
8 design decision, an infirmity of which is allegedly that Intel  
9 didn't properly balance speed and security back in 1995.

10 So for there to be any bar, Your Honor, on duty to  
11 disclose, which California has said has to be set at a very  
12 high level, whether you're applying the safety hazard standard  
13 or the central functional defect standard doesn't come close to  
14 being met.

15 So I would like to turn now to the LiMandri factors,  
16 and the plaintiffs are only relying on two. First, we will  
17 talk about actual knowledge, and there's no duty to disclose.  
18 So in talking about the LiMandri factors, the plaintiffs are  
19 not really entirely clear in this discussion about what the  
20 defect is. Their opposition brief at page 28 said, "Had the  
21 plaintiffs known about Spectre, Meltdown, and Foreshadow and  
22 the patches that would reduce performance, they would not have  
23 bought the products or paid less."

24 Your Honor, in some of the individual descriptions of  
25 named plaintiffs they talk about how if people had known about

1 these patches, they wouldn't have bought or paid less. That  
2 flies in the face of what they claim the defect is. But let's  
3 just assume for a moment the defect is Spectre, Meltdown, and  
4 Foreshadow. Well, there, the omission claim fails because, as  
5 Wilson and Hauck say, the actual defect at the time of sale is  
6 required and alleging "should have known" is insufficient, and  
7 the plaintiffs say that Spectre wasn't discovered until  
8 mid-2017 and the others later, and so there was no actual  
9 knowledge. So that's a problem.

10 But now let's talk about exclusive knowledge, where  
11 there is a big debate about what that standard is. So if it's  
12 not Spectre/Meltdown, if it is what they say in paragraph 2 of  
13 the complaint, that it is the design choice that goes back to  
14 1995, they can't demonstrate that Intel had exclusive knowledge  
15 triggering a duty to disclose, because the way the cases that  
16 we rely on and interpret that is "exclusive knowledge" means  
17 information is not available to the public. I think it is  
18 important to go back to the source, because there is a dispute  
19 in District Courts in California over whether it is a superior  
20 knowledge standard or an exclusive knowledge standard.

21 It all goes back to the case of Goodman v. Kennedy,  
22 which is a 1976 decision of the California Supreme Court, and  
23 we would submit that that case articulates an exclusive  
24 knowledge standard.

25 THE COURT: You know, let's assume it is exclusive.

1 Looking at LiMandri itself, it phrases it as "when the  
2 defendant has exclusive knowledge of material facts not known  
3 or reasonably accessible to the plaintiff."

4 How do I unpack that analytically in the following  
5 respect: I think that if it is exclusive knowledge, it is not  
6 exclusive to Intel, from what I have seen here, because it was  
7 widely known among computer scientists based upon the papers  
8 that were presented. However, does that make it reasonably  
9 accessible to a consumer plaintiff? Well, based upon my  
10 experience about a week and a half ago, it's not reasonably  
11 accessible to a typical plaintiff.

12 So analytically how do I evaluate this? If it is not  
13 exclusive to Intel, because it's reasonably well-known among  
14 computer architecture scientists and experts, and they are  
15 debating the pros and cons, and they are writing about this and  
16 talking about this at conferences, but it is not reasonably  
17 accessible to the plaintiff, how do I deal with this aspect of  
18 the LiMandri factor even assuming exclusivity is the measure?

19 MR. KATZ: I don't know of any case that says that  
20 because the information that a defendant is deemed to have  
21 exclusive knowledge of is complicated -- this is complicated  
22 stuff -- that that somehow changes the analysis. I think that  
23 what the cases are getting at, though, like I said, is the  
24 information out in the public, or is it solely internal? We  
25 cite a legion of cases that talk about that, like Andren v.

1 Alere, I think, answers your question because there --

2 THE COURT: Which case?

3 MR. KATZ: Andren v. Alere, the Southern District  
4 case from 2016. The Court there held that there was no  
5 exclusive knowledge because there were some published studies  
6 and a letter posted on the FDA website about a medical testing  
7 device. People were complaining about the malfunctioning of a  
8 medical testing device. There, that was deemed sufficient.

9 In Herron v. Best Buy, what we were talking about  
10 there, that had to do with a laptop battery life in Toshiba  
11 laptops. There was a cite to only one article in Newsweek nine  
12 months before the plaintiff purchased the Toshiba laptop from  
13 Best Buy talking about the MMO7 test for batteries not being  
14 sufficient and misstating the battery life. That was deemed  
15 sufficient for Best Buy to not have exclusive knowledge.

16 THE COURT: Is there an analogy here that is apt --  
17 there is definitely an analogy here -- whether it is apt or  
18 not, I would like your advice -- on the doctrine of fraud in  
19 the market or an efficient market hypothesis? Because if I  
20 conclude that if the test is exclusive and the technological  
21 details were well-known and debated among computer architecture  
22 specialists, even if it is not reasonably accessible to a  
23 plaintiff or to an ordinary consumer, the marketplace knows  
24 this information; and therefore, it doesn't satisfy that second  
25 factor of LiMandri?

1           MR. KATZ: Yeah, I think that's a good analogy. I  
2 would say to Your Honor, look at who the consumers bought the  
3 products from. The companies that were buying chips directly  
4 from Intel are sophisticated technology companies, like Dell,  
5 Lenovo, HP. They're all certainly aware of this research.  
6 They go to the same conferences. Your Honor, it is not just  
7 limited to academics publishing papers and scientists  
8 publishing papers. We are also talking about multiple patent  
9 applications that they cite. At least --

10           THE COURT: Which also are not accessible to the  
11 typical consumer, but I get your point.

12           MR. KATZ: But is that any different than tests  
13 published on the FDA website that an ordinary consumer goes on  
14 the FDA website? What the Courts are looking to, is it really  
15 exclusive, or is the information out there in the public  
16 domain? I would like to buy M&M's, but I didn't necessarily  
17 know about human trafficking in the supply chain in the  
18 Ivory Coast, which McCoy v. Nestle said that's sufficient for  
19 there to be notice of knowledge. Then there's Sud v. Costco  
20 about human trafficking in the Thai fishing industry for  
21 prawns.

22           THE COURT: Sure. I'm just trying to figure out how  
23 I explain my understanding of the LiMandri factor in the phrase  
24 "reasonably accessible to the plaintiff."

25           MR. KATZ: I think that has to be understood in the

1 sense that it is reasonably accessible in the public domain;  
2 that it doesn't necessarily mean that a particular plaintiff  
3 has to have read it. In all of the cases, the plaintiff said,  
4 "I wasn't aware of the Newsweek article. I wasn't aware of the  
5 letter on the FDA website." But otherwise, Your Honor, unless  
6 you have a reasoned principle, like whether the information is  
7 in the public domain, then you basically don't have any other  
8 LiMandri factors.

9           You're always going to be able to posit, in any  
10 technology case, for example, that the manufacturer has  
11 knowledge that a typical consumer may not have. But I haven't  
12 seen, as a limiting principle, that we look at how complex the  
13 issue is and then judge the factor that way. Otherwise, the  
14 other LiMandri factors basically are written out of existence.

15           And I must say, Your Honor, we searched high and low.  
16 I'm not aware of any case where the disclosure and discussion  
17 in the public domain was this widespread; that the plaintiffs  
18 recount over paragraph after paragraph after paragraph in their  
19 complaint where a defendant was deemed to have exclusive  
20 knowledge of the issue.

21           Your Honor, you can go back to the Goodman v. Kennedy  
22 case, the facts of that case, that involved an attorney that  
23 gave advice to his client about the complicated issue of stock  
24 registration, and third-party buyers of the stock allege that  
25 the attorney had a duty to disclose properly the registration

1 infirmities because that would have impacted their decision to  
2 purchase. There, the California Supreme Court held that the  
3 attorney did not have exclusive knowledge of the stock  
4 registration requirements in a transaction that the attorney  
5 himself handled.

6 I would argue that if the standard was lower, if it  
7 was like some kind of hybrid exclusive knowledge/superior  
8 knowledge, it's not within the realm of the understanding of an  
9 ordinary layperson, the decision in the Goodman v. Kennedy case  
10 would have come out the other way.

11 THE COURT: And as I understand the plaintiffs'  
12 allegations, and tell me if you understand them the same way,  
13 and we will hear from plaintiff later, but if we're talking  
14 about exclusive knowledge of the sort that was only learned  
15 and/or discovered after the Google Project Zero information was  
16 disclosed -- first of all, it wasn't exclusive to Intel if it  
17 was discovered by Google Project Zero, but if that's the sort  
18 of information that they are talking about, to that degree of  
19 granularity and specificity, there's no allegation in the  
20 consolidated amended complaint now that Intel knew about that  
21 before it was disclosed more generally in 2017.

22 Is that how you read the complaint?

23 MR. KATZ: That's right. That's right. They're  
24 saying that, in the complaint, it was discovered.

25 THE COURT: Right.

1           MR. KATZ: I think of "discover" to me -- that's why  
2 we set this out in my brief. I opened with if they're talking  
3 about that was really the defect, then there's no actual  
4 knowledge. That's what Judge Koh talked about.

5           THE COURT: And if they were to allege that that is  
6 something that Intel knew about before it was disclosed  
7 publicly or before it was even discovered by Google's  
8 Project Zero, that may be intellectually interesting, but  
9 that's not what is alleged in the complaint.

10          MR. KATZ: It's certainly not alleged in the  
11 complaint, and then, also, "should have known" is not the  
12 standard.

13          THE COURT: I agree with that. Hypothetically, if  
14 there would someday be a case that says, "You knew about this  
15 back then and didn't tell anybody," that may fit within the  
16 exclusive knowledge, even if it wasn't generally known even  
17 within the technical community, but that's not what they've  
18 alleged in this case.

19          MR. KATZ: Right. That's right. They could. But  
20 what you're talking about here, like we have been saying, is  
21 this design choice that goes back to 1995, and the complaint is  
22 literally trumpeting how this was so openly discussed: In so  
23 many articles, books warning about the caches being vulnerable  
24 to side-channel attacks, about speculation-based side-channel  
25 vulnerabilities, and the like.



1           If that's what they are claiming the design choice  
2 is, then it is out in the open.

3           THE COURT: Sure. So the only thing that really  
4 might not have been out in the open until Google Project Zero  
5 was that there was a proof of concept shown where, under  
6 laboratory conditions, yes, these things that were out in the  
7 open could actually be exploited.

8           Am I right?

9           MR. KATZ: Right -- that's what happened. Right,  
10 there was a proof of concept, but the disclosure obligation  
11 didn't change because the plaintiffs say that the defect isn't  
12 Spectre or Meltdown; it's this design choice.

13           And that design choice didn't change. It is on the  
14 same continuum from the time that Intel baked it into their  
15 processors in 1995 all the way to the present.

16           THE COURT: Well, what do you do with a circumstance  
17 where that design choice might not have been an issue if nobody  
18 assumed that it could ever be exploited, and it wasn't until  
19 either Google did the proof of concept, showing it could be  
20 exploited, that it showed that there was a defect, so we didn't  
21 know it was a defect until there was evidence that it could be  
22 exploited?

23           MR. KATZ: Your Honor, first of all, I would like to  
24 make clear that we take issue with the characterization of it's  
25 a defect.

1 THE COURT: Of course.

2 MR. KATZ: You're right. What happened is what  
3 ordinarily happens, which is that once it is disclosed, Intel  
4 and the industry -- bless you -- (Pause.)

5 THE COURT: Okay.

6 MR. KATZ: -- immediately swooped into action. They  
7 developed patch mitigation, and they rolled them out to protect  
8 people under the responsible disclosure principle.

9 Your Honor, that's no different than what happens  
10 with respect to Microsoft Patch Tuesday and any other number of  
11 security vulnerabilities that occur with respect to  
12 technological devices. If we are in a world where any time a  
13 security vulnerability is discovered, then all of a sudden we  
14 are running off and suing and saying that that's some kind of  
15 defect, there would be no end to it.

16 And that's what reasonable consumers know. They know  
17 that someone someday may discover that there is a  
18 vulnerability, and then the technology company, hopefully, will  
19 be able to go mitigate it with a patch. That's why we have  
20 updates to our iPhones in the middle of the night. It is a  
21 very common occurrence.

22 But it is counter-factual because what we're talking  
23 about here, as I opened my presentation with, the  
24 benefit-of-the-bargain theory relating to an alleged defect  
25 that has existed in continuous form since 1995.

1           Then they are trying to travel under one other  
2 LiMandri factor. That's active concealment.

3           THE COURT: And I don't even see where that is  
4 alleged, so maybe we will wait and hear what plaintiffs say  
5 that's alleged, unless you want to tell me where.

6           MR. KATZ: No, I don't --

7           THE COURT: Then we will see how they say --

8           MR. KAT: -- I mean, they are trying to rely on our  
9 truthful disclaimer to say that that's somehow active  
10 concealment. Your Honor's Premera decision --

11          THE COURT: Yeah. That can't be active concealment,  
12 but we will wait and hear what they say, if they do want to  
13 pursue active concealment, what is the active concealment?  
14 Then by all means, you'll have an opportunity to rebut and  
15 respond.

16          MR. KATZ: Then coming to a conclusion on the duty to  
17 disclose issue, I want to talk very briefly about reliance.  
18 One thing that really quite took us aback is the notion that  
19 plaintiff was espousing the opposition that there is only one  
20 element of reliance, even though they cite Daniel v. Ford Motor  
21 Company. Reliance, clearly under Ninth Circuit law, requires  
22 pleading both exposure and materiality. The standard stated  
23 that plaintiff must show that she would have been aware of the  
24 limited information and behaved differently.

25          No plaintiff here alleges viewing any Intel ad.

1 There is no response whatsoever to Intel's 9(b) argument, so  
2 they don't respond on the procedure or the substance, and so  
3 they haven't met the exposure element.

4 THE COURT: Yeah, although exposure can be  
5 derivative, can't it? Theoretically if one could show that  
6 there was some exclusive knowledge that the computer  
7 manufacturers didn't know -- Lenovo, HP, Dell -- and had they  
8 known about it, they would have done something differently.  
9 Isn't that the sort of derivative reliance that a plaintiff  
10 could benefit from?

11 MR. KATZ: That's not quite how I understand the  
12 exposure inquiry. The exposure inquiry is that a specific  
13 plaintiff -- here, each of the 95 named plaintiffs -- come  
14 forward and say what channel through which they would have  
15 received the information they allege was omitted.

16 THE COURT: Right. But I think derivative reliance  
17 can be -- one of those channels would have been an intermediate  
18 party in the manufacturing chain.

19 MR. KATZ: Well, could be, but they don't plead that.

20 THE COURT: Agree.

21 MR. KATZ: And that's actually Daniel v. Ford Motor  
22 Company. In Daniel v. Ford Motor Company, the exposure element  
23 was met because the plaintiffs said they got information when  
24 they went to the car dealership that the car dealership in turn  
25 had gotten from the manufacturer. That's how the exposure

1 element was met --

2 THE COURT: I thought there was another line of  
3 exceptions -- and I could be wrong -- but I thought that there  
4 another line of exception to the exposure requirement that is  
5 derivative reliance; that somebody else -- and again, I have  
6 not seen this pled -- but someone else who would have been  
7 exposed had this information been disclosed would have taken  
8 corrective steps either by further disclosing it to the  
9 consumer or by fixing some problem along the way.

10 MR. KATZ: Yeah, I'm not familiar, Your Honor, with  
11 that line of cases. But what I would say there is that, as we  
12 previously discussed, then all of those manufacturers would  
13 have been privy to all of this massive information that was in  
14 the public domain and would have been well able to disclose  
15 that to people.

16 THE COURT: Right.

17 MR. KATZ: So I don't think they're relying on that.

18 Finally, on materiality -- and I want to be quick to  
19 add that I don't think you even remotely get here, because if  
20 we are right on either safety hazard or central functional  
21 defect, these other issues, like exposure and materiality,  
22 they're moot because they don't state a claim at the threshold.

23 But with respect to materiality, we would submit no  
24 reasonable consumer would think that tech products are  
25 invulnerable. They all know that patching is a fact of life;

1 that there are going to be new security vulnerability  
2 discovered by clever people like the people at Google  
3 Project Zero and then they will be dealt with.

4 I would also say -- and Judge Davila does this in a  
5 number of his decisions applying common sense -- that  
6 disclosing to a consumer the design decision that they are  
7 talking about in 1995; that this is a decision that we made on  
8 speed versus security; and by the way, it is only theoretical;  
9 no one has even demonstrated it in a lab; we don't know how  
10 this could be exploited, but your processor is going to be  
11 really fast; and by the way, everyone else in the industry is  
12 using speculative execution and branch prediction, that that  
13 would have impacted the decision of any reasonable consumer.

14 And then --

15 THE COURT: It would have supported my  
16 mother-in-law's continued comment, "That's why I don't want to  
17 buy a computer"?

18 MR. KATZ: It could, Your Honor.

19 Then we have, with respect to the materiality  
20 analysis, five plaintiffs that bought in 2018, when all of the  
21 information that was claimed to have been admitted is known,  
22 and they are still going out and buying the computers. That  
23 demonstrates that it wasn't material at all; and two with the  
24 advice of counsel are going out and buying yet another device  
25 with an Intel chip. Of course, even today the chips of other

1 competitors are also vulnerable to cache timing/side-channel  
2 attacks. So when you wrap that all up, when they are talking  
3 about this design choice that was omitted, it is not at all  
4 material.

5 That's why we also point to that these  
6 vulnerabilities are disclosed routinely. Intel is not trying  
7 to hide anything. Intel discloses dozens and dozens of  
8 vulnerabilities on their website. They have been doing it  
9 since 2007, and that's in Exhibit 5 to request for judicial  
10 notice. US-CERT., in the week before Spectre/Meltdown, they  
11 disclosed 15 high-severity vulnerabilities and 217 in all, and  
12 that just ties into this is just a fact of life that reasonable  
13 consumers know about; that these security vulnerabilities are  
14 ubiquitous.

15 THE COURT: So on the judicial notice question, you  
16 do want me to take judicial notice of the content of what's on  
17 those websites?

18 MR. KATZ: Your Honor, I want the Court to take  
19 judicial notice just of the fact that security vulnerabilities  
20 are a routine aspect of modern existence, and I think  
21 Your Honor can find that from other sources. But just the fact  
22 that US-CERT disclosed 217 vulnerabilities in total, 15 of high  
23 severity, just in the week before, and Intel, just on its  
24 public website, which the plaintiffs cite to as a source, that  
25 they disclose it, that's really the only sense in which we are

1 asking Your Honor to take notice of it. It is just a fact that  
2 these exist and reasonable consumers know about them.

3 Courts, in the Ninth Circuit, they do routinely apply  
4 these principles in deciding at the motion to dismiss stage  
5 that there is no materiality. We cite the Apple Device  
6 Performance Litigation, where Judge Davila said that reasonable  
7 consumers know that increasing complexity of software puts  
8 strain on the hardware, and that, in turn, leads to battery  
9 degradation.

10 We cite to Williamson v. Apple, where all kinds of  
11 representations were made about the hardness of the glass in  
12 the iPhone screen, and the Court held that a reasonable  
13 consumer knows that an iPhone, when dropped, that glass can  
14 break, even if it has been reinforced.

15 On the change of behavior point, my last point on  
16 materiality, Noll v. eBay, I think that's an important case to  
17 judge the five plaintiffs who bought after knowing all of the  
18 information. Noll v. eBay is a Northern District case from  
19 2013. There is no reliance where the behavior didn't change,  
20 and that behavior there involved eBay's Good Till Canceled  
21 listing policy, where people said, "Had we known there was  
22 going to be a recurring charge every 30 days if our item hadn't  
23 been sold, we wouldn't have signed up for the Good Till  
24 Canceled process," and then after bringing their case, they  
25 continued to sign up. That was the dispositive feature on the



1 decision on lack of materiality, and I think that we are on all  
2 fours there --

3 THE COURT: I understand your point there.

4 Back to judicial notice, though, I have read,  
5 frankly, several times Judge Koh's decision in Hauck. I have  
6 read Judge Davila's decision in Apple Processor. Those are  
7 legislative facts, the analysis, and the reasoning that they  
8 have. But you want me to take judicial notice of the  
9 complaints. What am I supposed to do with the complaints  
10 that's proper within the framework of judicial notice? You  
11 also mention in your reply that I should take notice of the  
12 amended complaint in Hauck. What am I supposed to do with  
13 that?

14 MR. KATZ: Judge, I think that request is not as  
15 important anymore now that we have the decisions in the two  
16 cases, of course, but it was really just the fact that this is  
17 an industry-wide issue. It is being alleged that their  
18 processors are unmerchantable. It is alleged that AMD is  
19 subject to Spectre. In Apple, it is subject to Spectre and  
20 Meltdown.

21 We are not asking you to reach a conclusion as to  
22 whether that's true. I think that's also inherent in the  
23 complaint that has been filed in this case. We didn't know why  
24 the plaintiffs were really objecting, because they've stood in  
25 this court and told the Court about AMD being subject to

1 Spectre. That was, I think, one of the reasons given by some  
2 of the lawyers to be appointed to the steering committee here.

3 THE COURT: Well, just to keep things, not simple,  
4 but at least sort of clean, since I have read the District  
5 Courts' decisions in Hauck and Apple Processor, and I'm allowed  
6 to, as a legislative fact, or rather for other purposes, any  
7 objection from Intel if I were to deny from the bench the  
8 motion to take judicial notice, 139, just to keep things clean?

9 MR. KATZ: Yes. I think it would be sufficient to  
10 just rely on the decisions.

11 THE COURT: Okay.

12 Mary, I am denying from the bench Intel's motion to  
13 take judicial notice, Docket 139. I'm not going to write about  
14 it.

15 MR. KATZ: Your Honor, what I have just gone through,  
16 that's the meat of the presentation. I'm happy if Your Honor  
17 wants me to, but I think that it is sort of a corner case to  
18 talk about the economic loss rule that only applies to common  
19 law fraud, the Robinson Helicopter case, or their constructive  
20 fraud claim. I'm, frankly, not sure why they brought those  
21 causes of action. I can address them really briefly. It's  
22 Your Honor's pleasure.

23 THE COURT: There do seem to be some exceptions to  
24 economic loss doctrine. Let me find it. Judge Koh just wrote  
25 about that a few months ago in a very interesting decision.

1 Yes. Arena Restaurant v. Southern Glazer's Wine. It does seem  
2 to me that there exceptions in fraud cases, or alleged fraud  
3 cases, to the economic loss rule. One of the more meaningful  
4 ones, I guess, is where there is an independent duty that is  
5 independent really of the terms of the contract. That's  
6 really, I think, what we have here.

7 Now, you are going to say that there is no duty to  
8 disclose for all of the reasons you've described. But to the  
9 extent that there is or might be a duty to disclose, then that  
10 is a duty that's independent from the terms of the contract;  
11 and thus, an exception to economic loss doctrine.

12 Am I right?

13 MR. KATZ: First of all, let me start with this: My  
14 understanding is that the exception to the economic loss rule  
15 stated in the California Supreme Court's decision in  
16 Robinson Helicopter, and that says that if there has been an  
17 affirmative representation and it expose to the plaintiff to  
18 liability independent of economic loss, that that's an  
19 exception to the rule. The way that the rule is implicated  
20 here in this case is because -- and I think this is  
21 important -- plaintiffs are proceeding under a  
22 benefit-of-the-bargain theory of damages.

23 While we are on the subject of Judge Koh, Judge Koh  
24 said in Hauck -- she actually applied the economic loss rule to  
25 bar the negligence claim against AMD.

1 THE COURT: Right.

2 MR. KATZ: So I think if we are talking about her  
3 reasoning, that's just a classic application of the economic  
4 loss rule. I don't think there is any exception that goes  
5 beyond Robinson Helicopter. I think the most salient cases are  
6 cases that proceed under a benefit-of-the-bargain theory where  
7 there has been an alleged concealment.

8 The other case that we cite that's right on point is  
9 Stewart v. Electrolux, which is a 2018 case from the  
10 Eastern District. That dismissed a fraudulent concealment  
11 claim because the alleged damages for the self-cleaning oven  
12 were only for economic loss, and there's no difference in this  
13 case. There is no allegation that there is harm to other  
14 property. There is no allegation that any plaintiff has been  
15 exposed to some liability that's independent of pure economic  
16 harm that's plausible in this case.

17 THE COURT: Well, Judge Koh's analysis was economic  
18 loss doctrine in the context of negligence. Fraud, I think, is  
19 different. Robinson Helicopter was 2004 from the  
20 California Supreme Court. There is a year-later decision in  
21 California. I believe it is Butler Rupp v. Lourdeaux where the  
22 Court states exceptions have been permitted only where a breach  
23 of duty causes a physical injury, a covenant of good faith and  
24 fair dealing is breached in an insurance contract, or an  
25 employee was wrongfully discharged in violation of fundamental

1 public policy, or a contract was fraudulently induced.

2           So I do think when you get into this fraudulent  
3 inducement issue, it is another California-recognized exception  
4 to the economic loss doctrine, which even Robinson Helicopter  
5 says, is primarily to avoid the merging of law and contract.  
6 Well, fraud has always been an exception to that doctrine, I  
7 believe.

8           MR. KATZ: Yeah. And I don't think that applies  
9 here. There is not an allegation --

10           THE COURT: Fair enough.

11           MR. KATZ: -- as I read it, because the plaintiffs  
12 here are pleading a benefit-of-the-bargain theory, that when we  
13 are applying the economic loss, which is to maintain the  
14 division between tort and contract, that the analysis is the  
15 same, really, whether it is negligence that's being pled or  
16 fraud by omission is being pled. I think that's the teaching  
17 of Stewart v. Electrolux. There, I believe the allegation was  
18 made that there was a potential fire hazard, even with respect  
19 to these self-cleaning ovens, and that could expose the  
20 plaintiff to liability for other economic loss. That was  
21 deemed to be not plausible/too attenuated, and the complaint  
22 was dismissed, because really what the plaintiffs were getting  
23 at there was economic harm/loss of benefit of the bargain based  
24 on an omission theory relating to a defective product. And I  
25 don't think you can have a case that's more on all fours with

1 Stewart v. Electrolux than this case.

2 THE COURT: I thought the plaintiffs -- obviously  
3 their implied warranty sounds in contract and warranty. But I  
4 thought their unjust enrichment claim more sounded in fraud,  
5 and this is where we go to duty to disclose, and I understand  
6 your arguments about duty to disclose. But to the extent that  
7 sounds in fraud, then I didn't see that as being barred by  
8 economic loss doctrine.

9 MR. KATZ: You mean the unjust enrichment claim?

10 THE COURT: Yes.

11 MR. KATZ: I think that's separate. I don't think  
12 unjust enrichment applies here. I mean, this is very narrow in  
13 this case, because common law fraud and constructive fraud  
14 cases should be dismissed for all of the reasons that we talked  
15 about, because of all those duty issues and the LiMandri  
16 factors that apply to those. This is just like extra, extra  
17 ground for dismissal that only applies to the common law and  
18 constructive fraud cases.

19 THE COURT: But I thought that any claim that sounds  
20 in fraud, especially a fraudulent inducement type of theory,  
21 would not necessarily be subject to dismissal under economic  
22 loss doctrine, as California has interpreted it --

23 MR. KATZ: It might not be. But just on the facts  
24 alleged here, it is, just as Judge Koh found. I would say it  
25 is here, because they are not alleging -- they're alleging

1 economic harm.

2 THE COURT: But Judge Koh threw out a negligence  
3 claim, and they are not alleging a negligence claim here.

4 MR. KATZ: But even if they are not alleging a  
5 negligence claim, they are still not alleging anything in their  
6 benefit-of-the-bargain theory beyond economic harm, and so  
7 that's why the rule applies.

8 THE COURT: No, but if the economic harm came as a  
9 result of fraud, then the economic loss rule has that  
10 exception.

11 Am I wrong?

12 MR. KATZ: I guess I don't read it that way. I read  
13 it that -- in Robinson, there has to be, first of all, an  
14 affirmative misrepresentation. But second, it has to expose  
15 the person to liability independent of the economic loss. You  
16 have to state what that is. In Robinson Helicopter, it was  
17 liability that would potentially come from accidents and from  
18 government action because defective clutches were provided.

19 THE COURT: Right. But I'm looking at the  
20 post-Robinson decision from California, and that's Butler Rupp  
21 from 2005, and it seems to both explain -- maybe expand -- but  
22 certainly explain the Robinson Helicopter case, and that's  
23 where the exceptions to the economic loss rule are in the four  
24 areas I've described. The first three, I don't think are  
25 applicable, but the fourth one is fraudulent inducement.

1           MR. KATZ: Right. And there is no fraudulent  
2 inducement theory.

3           THE COURT: Fair enough. But then I'm not going to  
4 worry about economic loss doctrine so much as decide whether or  
5 not there really is a viable allegation of fraud.

6           MR. KATZ: I think, Your Honor, you'll never get to,  
7 hopefully, economic loss because, as we've said, you haven't  
8 had a safety hazard pled. You haven't had a central functional  
9 defect pled. You haven't satisfied either of the LiMandri  
10 factors. There is no materiality.

11           You've to get through all of those issues before you  
12 even consider whether you have to apply the economic loss rule.  
13 We would submit there definitely isn't a fraudulent inducement  
14 claim. It is a benefit-of-the-bargain claim. So it is  
15 controlled by the rationale of Stewart v. Electrolux. I didn't  
16 read any decision of the California Supreme Court at all  
17 revisiting the explication of the doctrine as it applies to our  
18 case.

19           With regard to the constructive fraud case, that's,  
20 of course, a special species of fraud. Tidenberg said that  
21 ordinary consumer transactions don't apply, and the plaintiffs  
22 rely on this case of Frye v. The Wine Library where you had a  
23 direct relationship where there was a wine wholesaler that was  
24 acting as an agent for a purchaser of expensive wine and  
25 advising and acting on the plaintiff's behalf, creating a



1 relationship of trust and confidence. Certainly nothing like  
2 that exists in our case, or you wouldn't have constructive  
3 fraud as a special species of fraud.

4 THE COURT: What's your view on the unjust enrichment  
5 claim? Sometimes unjust enrichment is just a remedies theory  
6 for a cause of action, but other times and other circumstances  
7 it is viewed as an independent cause of action.

8 How does that fit into this?

9 MR. KATZ: I think the way that it fits in here is it  
10 is controlled by Oestreicher v. Alienware that says basically  
11 if your unjust enrichment claim, the foundation of it is a  
12 fraud claim, the fraud claim fails, then the unjust enrichment  
13 claim fails because there is no enrichment that is unjust.  
14 And for all of the reasons that I've talked about today,  
15 because there is no fraud, there is no duty, and all of those  
16 other reasons, and that is really the only basis for the unjust  
17 enrichment claim, it's not viable either. So I think that's  
18 how that plays out.

19 The cases that they cite, like Astiana or ESG, those  
20 are cases where there was some underlying tort cause of action  
21 found that was viable on which to base an unjust enrichment  
22 claim. But where you don't have that, then that claim goes  
23 out.

24 For a similar reason, the UCL unfair prong claim,  
25 that's simply based on the nonviable fraud claims. Under

1 Hadley v. Kellogg, that claim also can be dismissed. I would  
2 also point to Hodsdon, which says that there is nothing unfair  
3 about not disclosing something that one has no duty to  
4 disclose. That's something that's frequently repeated in both  
5 the California cases and the federal cases.

6 The unlawful prong claim is only based on the  
7 bar loss. So that brings me to the conclusion of all of the  
8 nationwide claims, and I can speak to the state claims if you  
9 want me to.

10 THE COURT: I don't think we need to get into that  
11 now.

12 Let me ask for timing -- first of all, Dennis, do you  
13 want a break?

14 THE COURT REPORTER: I do.

15 THE COURT: Since I think you are done with your  
16 opening presentation --

17 MR. KATZ: Yes.

18 THE COURT: -- why don't we do this -- will this work  
19 for everybody? Let's take a 15-minute recess now. Then we  
20 will pick up with plaintiffs' response. Depending on timing,  
21 we will go straight into Intel's reply or take a break then.  
22 We will work through the lunch hour, but that way we will be  
23 done at some point, my guess is, before one o'clock-ish, give  
24 or take.

25 Will that work for everybody?

1 MR. SEEGER: That sounds fine.

2 THE COURT: Okay. Let's take a 15-minute recess.

3 (Recess.)

4 (Open court; proceedings resumed:)

5 MR. SEEGER: Judge, what we are trying to do to  
6 simplify our response to the motions to dismiss is we did a  
7 PowerPoint. I'm not beholden to this. If you want to take me  
8 off track and ask questions -- I thought it would be easier.

9 THE COURT: Fine to both. Yes, we will start there,  
10 and I will feel free to take you off track.

11 MR. SEEGER: Also, Judge, just so you know, Rosemary  
12 and I broke up the argument, if that's okay.

13 THE COURT: Absolutely.

14 MR. SEEGER: I'm going to give you a general overview  
15 of the facts alleged in the case to make sure we're all really  
16 clear --

17 THE COURT REPORTER: Mr. Seeger, I need you to slow  
18 down.

19 MR. SEEGER: Then I'm going to address standing and  
20 fraud and omissions as it relates to the UCLR, FLA, UCL claims,  
21 common law fraud, and constructive fraud.

22 Is that pace okay? It is going to take a little  
23 longer than I thought because I have to slow down.

24 THE COURT: We will be here all week. That's fine.

25 MR. SEEGER: I'll do my best. It is the New Yorker

1 in me.

2 THE COURT: And then what will Ms. Rivas address? If  
3 you do overview, standing, fraud and omissions, what will  
4 Ms. Rivas be talking about?

5 MR. SEEGER: She is going to do unjust enrichment,  
6 the affirmative misrepresentations, and the state law, to the  
7 extent you want to go into state law.

8 MS. RIVAS: Actually I'll be doing the implied  
9 warranty of merchantability, the UCL, the fraudulent and  
10 unlawful prongs, and then the unjust enrichment.

11 THE COURT: Very good. Thank you.

12 MR. SEEGER: Those too.

13 So, Your Honor, we start from the premise that the  
14 central function of every CPU is enforcing security privileges  
15 and restrictions. CPU engineers work very hard to restrict  
16 memory access by unauthorized actors. These are sort of basic  
17 concepts. I've blown up each statement I make or references to  
18 the complaint. Some of those, I will read; some, I won't. But  
19 they are all in the PowerPoint in front of you.

20 Intel repeatedly acknowledged that security is an  
21 essential function of CPUs. We have allegations in the  
22 complaint that say they represented these CPUs were secure to  
23 the core. Again, designed to give the consumer device/Intel  
24 inside comfort in that fact.

25 Intel asserted that its processors stand out by

1 extending protection outside the operating system and into the  
2 hardware layer. That's critical to this case, Your Honor,  
3 because despite all of the vulnerabilities we just heard from  
4 Mr. Katz, most of what he is really talking about are software  
5 vulnerabilities -- the slide -- well, we are not supposed to be  
6 talking about tech base, so I'll put it aside. But there was a  
7 discussion about this then.

8 But the hardware layer is what we are really focused  
9 on in this case. These are hardware defects.

10 So, as designed, Intel's CPUs permit unauthorized  
11 access by programs to protected memory secrets. That's Flaw 1.  
12 That's the transient instructions coming in and Intel's CPUs  
13 delivering real values/real secrets to transient instructions.

14 I have to distinguish right now this case from the  
15 AMD case. AMD does not have Meltdown and Foreshadow. They  
16 don't have a Flaw 1 issue. They do have a Spectre issue.  
17 That's critical. Although even in the Apple case, where there  
18 is an allegation that the Apple chips in the Apple iPhones and  
19 iPads have a Meltdown issue, they do not have a Foreshadow  
20 issue. And I am going to talk a little bit and distinguish  
21 those cases as we go on, but we have the complaint references  
22 here.

23 I just went over this. This basically on this  
24 slide -- as designed, they permit unauthorized access to  
25 programs to protected memory secrets. It is Flaw 1. Here is

1 from -- we have shown this before. Here is our outline of what  
2 the real defects in the case are. These are in paragraphs 222  
3 and 223 of the complaint.

4           Flaw 1 we discussed. Flaw 2 is what we referred to  
5 as an incomplete undo, where the processors speculatively  
6 execute instructions, but when speculative execution is wrong,  
7 the values remain in the cache, making it very easy for a  
8 side-channel attack to come in and pick it up.

9           Again, here is just a quick slide on what the  
10 differences are between the Intel case and the AMD case. In  
11 Intel, you get the real value, when a malicious actor sends out  
12 a transient instruction, that will ultimately be wiped out. It  
13 will ultimately be denied. Intel allows the CPUs to deliver a  
14 real value -- a secret -- photos, bank account information,  
15 even when speculative execution is wrong. It allows it to  
16 happen. AMD doesn't have that issue.

17           Now I'm not going to go into these. These were the  
18 demonstrations you've seen before about how the values go to  
19 transition instructions, and then even when the instructions  
20 are wiped out, they leave the secrets in the cache.

21           Intel was aware that its CPUs allowed unauthorized  
22 program instructions to access protected secrets. We have that  
23 in the complaint. We've referenced the complaints, 246 and  
24 256. And I won't go into this. It is a lot to read. But  
25 again, it is a restatement in the complaint. It is an

1 allegation in the complaint as to exactly how these defects  
2 come about.

3           And they were aware that they were designed, which  
4 allowed secrets to be placed into the cache by unauthorized  
5 users presented substantial security risk to consumers. While  
6 they hid that information from the consuming public, these  
7 vulnerabilities pose a severe security threat in various patent  
8 filings that we have gone and read again -- again, not  
9 something a consumer would go and look at. You can see that  
10 Intel is concerned about this.

11           I want to make something else very clear, Your Honor.  
12 There was discussion earlier about what we say in the complaint  
13 about when the defects occurred. Flaw 1, we believe, came --  
14 we have no discovery in the case, so again, subject to that.  
15 Flaw 1, we believe, arose around 2006 when Intel decided go to  
16 this multi-core processors. It might have been in there from  
17 1995 in Flaw 2. We don't know that for sure. We know they are  
18 there now, but we believe it was 2006.

19           We also have alleged that Intel was aware that its  
20 hardware design could be used to leak privileged information  
21 and even claimed knowledge and awareness of means to modify its  
22 chip designs to prevent such attacks. We see that in the  
23 patent filings. Why they were never implemented, we will find  
24 out in discovery, but we have alleged those details. It's very  
25 important.

1           THE COURT: So what do you contend Intel should have  
2 disclosed in 2006?

3           MR. SEEGER: Well, I mean -- it is clear that Intel  
4 knew at that point that they had what we refer to as a  
5 "leaky cache." It is clear that they understood in 2006 that  
6 speculative execution, when it goes wrong, was still going to  
7 get real values. It was still going to get real secrets. At  
8 that point in time you would think that there would have been a  
9 focus on either disclosure or correcting the problem early.  
10 But they didn't do that. They touted -- we believe what was  
11 going on is there was a chip war mostly between AMD and Intel,  
12 and Intel had touted its computers and its processors as being  
13 the fastest.

14           THE COURT: I understand. What should they have  
15 disclosed to avoid what you now contend is their liability for  
16 omissions?

17           MR. SEEGER: Okay. So they understood that there  
18 were the defects there. I think at that point in time we've  
19 alleged that they understood that there was this thing called a  
20 side-channel attack. If you remember, the way we characterized  
21 the side channel attack, it's making the information available  
22 for the malicious actor to come in with the side channel and  
23 take the information out. So we believe those two things put  
24 together, that a responsible chip manufacturer would have made  
25 consumers either aware of these defects or corrected them



1 immediately.

2 THE COURT: So assuming that they didn't correct them  
3 immediately because they had their own reasons, probably  
4 performance-related, you're saying that if they are not going  
5 to correct them, they should have disclosed that there was  
6 vulnerability to side-channel attack creating potential  
7 exposure --

8 MR. SEEGER: Of your secrets.

9 THE COURT: -- of secrets.

10 Now, wasn't that known by the computer architecture  
11 community outside of Intel based upon a number of the articles  
12 and papers and conferences that you have cited and referred to  
13 in the complaint?

14 MR. SEEGER: We don't think so, Your Honor. I'll  
15 tell you what we think might have been known at that point in  
16 time, and I think we have to look at this at different points  
17 in time. But we don't think there was any knowledge by anyone  
18 outside of Intel about Flaw 1; that is, returning real values  
19 to transient instructions.

20 Now, maybe people who study this stuff at the  
21 academic level and maybe the company internally in their patent  
22 filings were focused on that, but we don't think there was  
23 anybody outside of Intel that was aware of that. We think,  
24 once again, without discovery in this case, what supports that  
25 is the fact that no other chip manufacturer has the problem

1 with Flaw 1, the real values to transient instructions, that  
2 Intel has today.

3 Now, when Intel says that this is an industry-wide  
4 problem, they must be referring to Spectre, which is what we  
5 call the Flaw 2 design, the incomplete undo, because, yes, it  
6 does look like there is an industry issue with Spectre, but not  
7 with Meltdown, not to the extent that Intel has it, and clearly  
8 not with Foreshadow.

9 By the way, Your Honor, if I could just make one  
10 little point which we think is important. We've spent a lot of  
11 time since the case has started talking about Spectre. While  
12 we were talking about Spectre in June, Meltdown was coming into  
13 the picture. Since June, we've now learned about Foreshadow,  
14 and there are variants there.

15 Intel pushes out patches that they tell their  
16 consuming public to download, and each of those patches have an  
17 impact on performance. We don't know what's around the corner.  
18 Until this is corrected, the patches don't fix the problem. I  
19 have a slide on this. I don't know if it is coming up next.

20 Intel itself has acknowledged that it is a hardware  
21 problem, and they have promised to design and ship out a new  
22 CPU. It hasn't happened yet. But that's where the fix has to  
23 occur. Otherwise, there will be -- with the new variants that  
24 are coming and the new exploits that we will be learning about,  
25 people will be downloading patches, and they will continue

1 having an impact on performance in the future.

2 I have a few slides, which I'll go through very  
3 quickly which deal with the patches and the mitigations that's  
4 recommended by Intel.

5 THE COURT: If I want to write down what specifically  
6 should have been disclosed about Flaw 1, not Flaw 2, but  
7 Flaw 1, could you articulate that once more for me so I can  
8 write it down precisely? What should have been disclosed about  
9 Flaw 1, given that they chose to leave that flaw in place?

10 MR. SEEGER: Again, I'm not a marketing person. I  
11 don't write disclosure letters.

12 THE COURT: No, but you're claiming liability by  
13 omission. I want to know specifically what was omitted that  
14 should not have been omitted.

15 MR. SEEGER: I think what specifically should have  
16 been omitted is that Intel's computers, like others, has  
17 out-of-order execution, speculative execution. But what they  
18 don't have is that while those things are -- that secrets that  
19 are in the computer's memory could be made available to  
20 malicious attackers using certain kinds of attacks,  
21 side-channel attacks.

22 THE COURT: But doesn't that describe both Flaw 1 and  
23 Flaw 2?

24 MR. SEEGER: No, because Flaw 1 and Flaw 2 are the  
25 defects that allow side-channel attacks to be successful. They

1 are not themselves side-channel attacks.

2 THE COURT: So this omission that you've just  
3 described is the same omission that was at stake in the Hauck  
4 case and the Apple case, right?

5 MR. SEEGER: I don't think so, Your Honor. I did not  
6 think a Flaw 1 allegation was made in either one of those  
7 cases.

8 THE COURT: So articulate for me what is the omission  
9 that makes this case different from the Hauck case and the  
10 Apple Processor case. What is the omission here that is at  
11 issue that they should have disclosed that shows this case is  
12 different from either the Hauck or the Apple Processor cases?

13 MR. SEEGER: I mean, now is a good time to do it. I  
14 will first answer your question, but I think now is a good time  
15 to talk about what was going on in those cases and maybe the  
16 points that were missed by the plaintiffs in those cases.

17 But yeah, what we put in our complaint is --

18 THE COURT: Which paragraph are you referring to?

19 MR. SEEGER: I'm now looking at paragraph 408g.

20 MS. RIVAS: It is from the complaint. That's through  
21 all of the causes of action.

22 THE COURT: You said paragraph 408?

23 MR. SEEGER: No. I'm sorry. It is from the -- I  
24 think it is from our brief.

25 MS. RIVAS: No, it is from the complaint.

1 MR. SEEGER: It is 408g.

2 THE COURT: One moment. Let me get to that.

3 All right. So 408g reads, "Concealing and/or failing  
4 to disclose material facts, including but not limited to: That  
5 in designing its CPUs, Intel failed to take measures to protect  
6 confidential information from attacks by unauthorized users  
7 while knowing its CPUs were vulnerable to attacks."

8 So I guess if that's what the claim is, are you  
9 telling me that you've alleged also that failure to disclose,  
10 that information that was not disclosed, was not known  
11 generally among the computer architecture experts outside of  
12 Intel and that somehow that particular failure is different  
13 from what was at issue in the Hauck v. AMD case and the Apple  
14 Processor case?

15 MR. SEEGER: Right. And just to remind Your Honor,  
16 in the Hauck case, the Court's problem with the complaint in  
17 that case is they didn't allege defect. This is what the Court  
18 said -- that they alleged 20 years of vulnerabilities, but they  
19 didn't specifically allege defect. I don't think there is any  
20 doubt that in this case we have specifically alleged the  
21 defects.

22 THE COURT: And the defect that you are specifically  
23 alleging, to be precise, is what?

24 MR. SEEGER: It is in paragraph 222 of our complaint.

25 THE COURT: One moment. Let me get there.

1 All right. I am at 22. What's the defect?

2 MR. SEEGER: What we've alleged -- and I'm  
3 paraphrasing because I don't have the exact complaint. If you  
4 read what's in front of you while I say this, I think you will  
5 see. The first half of the paragraph discusses what we call  
6 Flaw 1, which is Intel processors allowed program instructions  
7 to have unauthorized access to protected data.

8 The second half of the paragraph, I believe, lays out  
9 what we've now called Flaw 2, and that's incomplete undo.  
10 Intel processors speculatively execute instructions. But when  
11 speculation is wrong, the effects of those instructions are not  
12 completely unknown.

13 Now, I know I just paraphrased the paragraph in front  
14 of you, but that's what we alleged.

15 THE COURT: All right. So now -- you don't need to  
16 read that. I would just like to know, so it can end up in an  
17 opinion and order, what's the defect?

18 MR. SEEGER: So the specific defect is that -- I  
19 mean, I don't know if I can describe it any better than I have.

20 THE COURT: You're welcome to phone a friend, but  
21 somebody has got to be able to articulate for me what the  
22 alleged defect is.

23 MR. SEEGER: Other than what I have said, so I  
24 haven't done it obviously.

25 THE COURT: Then you can repeat it, and I'm going to

1 take it down word for word.

2 MR. SEEGER: Okay.

3 THE COURT: So you were first directing me to 222.

4 MR. SEEGER: Yes.

5 THE COURT: Then you were paraphrasing it. What you  
6 said doesn't match up that closely with what's in 222. So now  
7 I just want you to tell me, from plaintiffs' perspective,  
8 what's the alleged defect?

9 MR. SEEGER: Your Honor, if I could, I'm going to  
10 pull up paragraph 222, and I will walk through it and point out  
11 which aspects of it relate to what we have identified as the  
12 first defect and then the second, if that's okay.

13 THE COURT: Okay.

14 MR. SEEGER: Because I just think it is important.

15 THE COURT: Take your time.

16 MR. SEEGER: Paragraph 222 in the complaint reads --  
17 I'll go to the second sentence, because the first one talks  
18 about Intel sacrifices.

19 "Specifically, and as explained here, Intel's  
20 implementation of Dynamic Execution created security  
21 vulnerabilities within its CPUs, rendering them defective. For  
22 example, Intel undermined the security of its processors by  
23 implementing, that's out-of-order execution and speculative  
24 execution in a way that (i) created windows of time during  
25 which an unauthorized user could have the processor make

1 unnecessary or unauthorized memory access to copies of  
2 sensitive or privileged information." We have referred to that  
3 as the first flaw, Flaw 1. That's Meltdown and Foreshadow.  
4 That's returning secrets to the transient instruction, in  
5 English.

6 Then the second part of that, "(ii ) allowed that  
7 information (or critical data about the location or contours of  
8 that information) to remain in the CPUs' caches after the  
9 mistaken or unauthorized access, (for example, an exception)  
10 was discovered." That is what we have referred to as Flaw 2.  
11 That's Spectre, Meltdown, and Foreshadow.

12 THE COURT: And the plaintiffs' allegations are that,  
13 in order to avoid liability under an omission theory, if Intel  
14 was not going to shut down or fix these flaws, then you're  
15 saying they should have disclosed that, as you say, "By  
16 implementing out-of-order execution and speculative execution,"  
17 and the way that they've done it, "Intel created windows of  
18 time during which an unauthorized user could have used the  
19 processor to make unnecessary or unauthorized memory accesses  
20 to copies of sensitive or privileged information."

21 So that's what they should have disclosed. You are  
22 telling me that's what you are alleging that they have not --  
23 that was not generally known, at least among computer  
24 architecture experts, and that's the first basis of the failure  
25 to disclose or the first defect that was not adequately



1 disclosed?

2 MR. SEEGER: Correct, Your Honor.

3 Then to just try to answer it -- I am going to take  
4 another stab at what would the warning be. They could have  
5 said, "Our chips expose user information to unauthorized  
6 program instructions after the program is determined not to be  
7 authorized."

8 They could say, "Our chips do it differently than  
9 AMD, so you have a problem. We may all have this issue, but  
10 this could be a problem and that your secrets could be  
11 revealed," because at that point in time I think most consumers  
12 were choosing between Intel and AMD, the two leaders in the  
13 field.

14 Your Honor, from here, unless you have any more  
15 questions on that point, I'm going to quickly go through,  
16 again, on the facts, the mitigations. There are multiple  
17 mitigations needed. By the way, I think an issue that goes to  
18 the materiality of the defect is that Intel is telling all  
19 users of Intel chips that they must download these patches. It  
20 is to fix a problem that related to what we have identified as  
21 a defect.

22 I'm going to skip to standing, because that's what we  
23 will get into some of the cases that I think Your Honor may  
24 want to discuss.

25 Your Honor, from our perspective -- we understand

1 that Intel's contention is that the claim that consumers  
2 overpaid for devices containing Intel chips is not sufficient  
3 for Article III standing. We obviously don't agree. We have  
4 got a number of cases -- Hinojos and some that we have spoken  
5 about. In re Chrysler-Dodge-Jeep Ecodiesel Marketing case for  
6 overpaying for goods on account of a manufacturer's  
7 misrepresentations or omissions satisfies the injury in fact  
8 causation requirements.

9 We allege plaintiffs' CPUs suffer core defect or  
10 central defects, we could call them, because that relates to  
11 other tests we will be talking about, reflecting Intel's design  
12 decisions to gain performance at the expense of user security.  
13 That's unauthorized access, Flaw 1, and incomplete undo, Flaw 2  
14 that we just discussed. And these are our allegations in the  
15 complaint that support that.

16 Some of the discussion with Mr. Katz earlier almost  
17 sounded like summary judgment type issues, because we think a  
18 lot of these issues are fact issues that have been discussed.

19 Let me speak briefly about some of the cases. The  
20 biggest case they rely on standing is Birdsong case. The  
21 problem with Birdsong, from their perspective -- and there are  
22 many problems with it. One, it involves an iPod where the  
23 plaintiffs in that case claimed could cause hearing problems.  
24 The Court really kind of looked at that, I believe, in reading  
25 that case, almost like a silly case; you could just turn the

1 volume down on the iPod. There was no defect there that  
2 related to the central function of the iPod in question. The  
3 risk that they talked about was purely speculative.

4           So, again, it is kind of a silly kind of case -- and  
5 I don't mean silly in the sense that Mr. Katz is silly. It is  
6 kind of a silly case, though, because I don't think it really  
7 applies here at all. It is a consumer misuse case. People  
8 were hurting their ears -- some people, not even all. It  
9 wasn't even an allegation that everybody suffered ear injury.  
10 Some users kept their iPods up too loud and hurt themselves.

11           The other case that they rely upon is the Cahen case.  
12 Again, that's a case that involved Toyota cars that had  
13 electronic control unit. Now, the Court, when you look through  
14 that case, says that almost every car on the road has these  
15 electric control units in them. And even though there is this  
16 theoretical risk of hacking, I think you have to look at that.  
17 And there is language in the opinion, although I'm not saying  
18 that the judge in that case said it was the most important  
19 language, but the hacking we are talking about is driving  
20 information. It is almost -- it's not secrets. It's not  
21 photos. It's not letters. It's not your account information.  
22 So the people in this case bought a car, and at the end of the  
23 day they had a car with this speculative risk of hacking --  
24 your driving information. I just don't think the Court bought  
25 that this was really a central function of what people were

1 purchasing.

2 THE COURT: It wasn't hacking that some nefarious  
3 entities could take over your car and cause an accident; it was  
4 just that they would know where you were?

5 MR. SEEGER: There is a mention of that in the case.  
6 Again, the Court refers -- I think the plaintiffs alleged that,  
7 and the Court said it was a speculative risk. I don't remember  
8 from the case if there was any conclusion as to whether that  
9 was a real risk or that really happened.

10 THE COURT: Well, since we only have a proof of  
11 concept here on Flaw 1 or Flaw 2, how is this not a speculative  
12 risk?

13 MR. SEEGER: Here is the biggest problem that they  
14 have with that argument, and, this, we do allege in the  
15 complaint. There is no fingerprint that's left behind for any  
16 of these exploits. We don't know -- you wouldn't know it,  
17 Your Honor, if you had been hacked by some malicious actor who  
18 opens up an Amazon account. Let's say you are on Amazon. They  
19 open up an Amazon account. They now have access to the system,  
20 and they send in a malicious code, which then starts running on  
21 all the computers that are on the Amazon system. You just  
22 wouldn't even know if you had been hacked. I know we are not  
23 supposed be referencing science today. I think we can for our  
24 own use. I am not using anything they said. But  
25 Professor Conte had explained that there would be no

1 fingerprint left behind, and we alleged that in the complaint  
2 as well.

3 THE COURT: Assuming that's accurate, though, how  
4 does that take us out of the range of speculative risk? How  
5 are you going to prove that there is a non-speculative risk?

6 MR. SEEGER: I think the best way to prove it is by  
7 Intel's conduct. Intel is telling everybody who has their  
8 chips to download patches. Those patches impact the very thing  
9 that made them famous and rich; it's the speed of their  
10 processors. Why would Intel interfere with this processing  
11 speed of their computers if they thought that there was really  
12 no risk here; if this was only a proof of concept? It kind of  
13 stretches the imagination a little bit.

14 So Intel clearly believes there is an issue here.  
15 Intel's patents' applications suggest they thought there was an  
16 issue here. I mean, I think that's the best answer I have.

17 THE COURT: Is there an inconsistency in your  
18 position that standing comes from an overpayment and also your  
19 position that this is a core or fundamental defect, because if  
20 something really seemed to me to be a core or fundamental  
21 defect, I wouldn't buy the product or expect anyone would buy  
22 the product. But if someone would buy the product, but at a  
23 lower price, then it doesn't seem to be a core defect or a  
24 fundamental defect that basically affects the ability of the  
25 thing to operate at all.

1           Is there an inconsistency there?

2           MR. SEEGER: I don't see it.

3           THE COURT: Why not?

4           MR. SEEGER: There is interesting language in the  
5 Hinojos case, which addresses that, I believe. I think that's  
6 the case where they say that price is a very important factor.  
7 It determines the status of a product. It suggests a lot of  
8 things about it.

9           Now, I'm not saying -- I don't think we've alleged  
10 that with a lower price, we would have bought these chips. I  
11 think what we've said is they didn't get what they paid for,  
12 and so we've overpaid for them in that respect. I don't know  
13 what the price point is where our plaintiffs would accept the  
14 defect. It may be some price point, but it is not what they  
15 purchased the product for.

16           THE COURT: I thought the theory of an overpayment  
17 is: We bought something, and we paid X dollars for it, but had  
18 we known its true features, we would have only paid Y, and that  
19 delta between X and why is our overpayment. Now, if we really  
20 do have a fundamental or core defect, we wouldn't have even  
21 paid Y. I'm not going to buy a car that doesn't work, no  
22 matter how cheap it is.

23           MR. SEEGER: Well, you are not going to buy a car  
24 that doesn't work, and I guess your point is you wouldn't buy a  
25 computer chip that doesn't protect your security because that

1 doesn't work either, so then the overpayment is the full price  
2 for what they purchased.

3 THE COURT: By the way, let's get to it now then.  
4 Why do we have a certain number of plaintiffs who purchased  
5 these computers with these chips after knowing of the flaws and  
6 even a few after filing a lawsuit?

7 MR. SEEGER: I'm a little befuddled by that too,  
8 because I think Mr. Katz has made a little too much of that.  
9 First of all, from our understanding of what our plaintiffs did  
10 in this case, they still have the defective computers, but they  
11 went out on their own and covered. They bought a new computer.  
12 So I guess the question is --

13 THE COURT: With the same flaws.

14 MR. SEEGER: Well, this is what I'm saying -- this  
15 issue about with the advice of counsel, I'm not really clear  
16 what Mr. Katz is talking about there.

17 But we do have a handful of consumers who went out  
18 and bought another computer, because they don't know what the  
19 defect is. They do not understand exactly what's going on, and  
20 I don't think they have an understanding of what the  
21 distinction is between an Intel chip and an AMD chip.

22 They may believe that this is the best they're going  
23 to get, but they are replacing their older computers because --  
24 one thing I also have to point out, the older computers are  
25 more impacted by the patches than the newer ones. And you are

1 going to be more impacted if you don't have PCID. I don't know  
2 if you remember the discussion about that.

3 THE COURT: I remember the discussion of it; I don't  
4 remember what it is.

5 MR. SEEGER: I actually wrote it down somewhere. I  
6 forget. It is something-ID, but I forgot what the acronym  
7 stands for. But it is an added level of protection for your  
8 computer. Those computers seem to be -- if you implement the  
9 PCID, and you download the patches, your performance is still  
10 impacted, but not as greatly as computers that don't have PCID,  
11 which is probably half the class in this case.

12 THE COURT: So the consumer class -- putting aside  
13 some of the entities, does the basic consumer class even notice  
14 the difference in performance? Do we know yet?

15 MR. SEEGER: Yeah, they do. Are you going to notice  
16 it if you are just maybe doing one thing. But many people open  
17 up various programs on their computer and have them going at  
18 the same time. In that instance, after these patches are  
19 downloaded, we believe that you would notice an impact. So a  
20 lot of people -- and I don't mean this in a pejorative way,  
21 because a number of people are kind of computer geeks. Many of  
22 our clients are, and they really pay attention to boasting  
23 about performance. They want the fastest chip. They want the  
24 most efficient computer. They want to be able to run many  
25 programs at one time or to want stream video while they have



1 other things going on. Yeah, there are impacts on it.

2 THE COURT: I have no idea whether this will or will  
3 not have an impact if we ever get to class certification, but  
4 I'm going to utter those words right now so I can find this  
5 conversation again down the road.

6 MR. SEEGER: I understand, Your Honor.

7 On the standing issue, look, other than just to  
8 summarize that when a manufacturer sells a defective product  
9 which causes consumers to be misled at the point of sale -- and  
10 that's what we believe. We believe they knew about the  
11 defects. It wasn't disclosed at the time they sold it to the  
12 consumers, the consumers didn't know. Because of that, they  
13 paid more, and they got less than they believed they were  
14 purchasing, and the consumer suffered.

15 Your Honor, at this point, I would slide on down --

16 THE COURT: Do you want to briefly address standing  
17 to seek injunctive relief. I know Mr. Katz didn't mention it,  
18 but it is in their brief.

19 Do you want to respond to that?

20 MR. SEEGER: Yes. I think our position is the  
21 injunctive relief would be providing the notice that we are  
22 talking about to the consuming public about their chips and the  
23 defects.

24 THE COURT: But the notice is now out there, right?  
25 The information is now out there. So what more injunction

1 would be appropriate? Or to be more precise, why is there  
2 standing to get future injunctive relief?

3 MR. SEEGER: Your Honor, I guess I would have to  
4 disagree slightly with the "notice is out there" concept. We  
5 talk to consumers all the time. They are totally not aware of  
6 what's happening. They are not up on the latest trade  
7 publications about Spectre, Meltdown, and Foreshadow, and if  
8 they see those words, they wouldn't totally understand them. I  
9 think a lot of people think that this is the kind of software  
10 hacking that you get or the vulnerabilities that come from  
11 software programs, and that's if they even had a basic  
12 understanding.

13 I can tell you -- and this means nothing other  
14 than my -- not that it is important to Your Honor. But when I  
15 first got involved in the case, the learning curve here for me  
16 was extremely high. So when you talk about whether a consumer  
17 understands this problem right now, I really doubt it.

18 THE COURT: So then if a consumer would have been  
19 told at the time of purchase that these processors, by  
20 implementing out-of-order execution and speculative execution,  
21 do so in a way that creates a window of time during which an  
22 unauthorized user could have the processor make unnecessary or  
23 unauthorized memory accesses to copies of sensitive or  
24 privileged information -- and I'm quoting from the complaint at  
25 paragraph 222i, would that have made a bit of difference to a

1 consumer; and if not, how is it material?

2 MR. SEEGER: Well, that does relate to our issue on  
3 the injunctive relief because we believe that if notice --  
4 again, if notice is going to be provided, it should be provided  
5 in a way that a consumer would understand. I don't think a  
6 consumer understands anything you just read, Your Honor. But I  
7 think a consumer would understand that your secrets may be  
8 susceptible to various exploits that take advantage of defects  
9 in the Intel CPUs.

10 THE COURT: Now, if we're going to -- and this is  
11 what is making it difficult, taking a consumer protection  
12 environment case or context on a fraud claim -- what should the  
13 consumer have been told? That's what I asked you a few moments  
14 ago. The answer you gave me was paragraph 222. I think we now  
15 both agree that had a consumer been told that, it wouldn't have  
16 meant one thing to that consumer.

17 Now what you are saying is, "Well, what they really  
18 should have been told is that no computer is free from  
19 vulnerability; every computer can be hacked." Okay, fine.  
20 They were told that. Everybody knows that. So then you go to,  
21 "No, they should have been told a little bit more so that a  
22 normal consumer would understand it and be motivated by it."

23 But when I asked what that would be, and you gave me  
24 the 222, now we both agree that no consumer would understand  
25 that, except a subclass of technology specialists.

1           MR. SEEGER: Yes. Your Honor, I apologize for being  
2 confusing on this. I actually did -- I have it in front of me  
3 now. I said something a little bit different, so do you want  
4 me to say it?

5           THE COURT: Whatever you want; whatever you want.

6           I'm just trying to understand what Intel should have  
7 done under plaintiffs' theory to avoid liability, and I'm not  
8 going to accept simply, "Oh, they never should have put the  
9 product in the market in this fashion." I think they are  
10 entitled put a product in the market that balances performance  
11 with security, theoretical vulnerability.

12           I'm hearing you say, "Well, then they at least should  
13 have disclosed that." Okay. What precisely should they have  
14 disclosed? Then when I thought we had made progress, and you  
15 told me what they should have disclosed, we then ended up in a  
16 situation where "but no consumer would have understood that."

17           MR. SEEGER: No consumer would understood paragraph  
18 222. I also did earlier -- I read something, which I thought  
19 notice -- I guess could be what notice would look like. If you  
20 remember, I was reading language that said our chip exposes  
21 users to unauthorized program instructions after the program  
22 determines it not to be authorized.

23           Other chip companies do it differently and more  
24 securely. No competitor is going to say something like that.  
25 But other chip companies do -- and I'm doing this on the fly,

1 because I didn't anticipate this question.

2 THE COURT: You didn't anticipate that I would be  
3 asking what is the specific omission that they should have  
4 disclosed?

5 MR. SEEGER: I did. But when I pointed you to 222,  
6 and I said "Flaw 1" and "Flaw 2," I wasn't connecting with you.  
7 I think you were looking for some more of a "give it to me in  
8 plain English."

9 THE COURT: Well, yeah, because I'm thinking if this  
10 is a consumer protection, because it is not a personal injury  
11 case. It's a case where you are saying the consumers bought a  
12 product without being given adequate information. I understand  
13 that there is no allegation of an affirmative  
14 misrepresentation. I don't think I've seen any allegation of  
15 active concealment, but I'll let somebody talk about that if  
16 you want to. So it's an omissions case.

17 So that makes me want to ask, what should have been  
18 disclosed to avoid omissions liability?

19 MR. SEEGER: I think the answer -- and I hope this  
20 doesn't sound like I'm trying to oversimplify it -- would be  
21 Intel prides itself on processing speed. "We have figured out  
22 a way to make our processors faster than everybody else. The  
23 problem in doing that, we have sacrificed some chip security,  
24 and you should understand that we do things a little  
25 differently than other chip manufacturers. And some of your

1 secrets could be made available to an attacker using a certain  
2 kind of attack, although we haven't seen a lot of it," I mean,  
3 even something like that.

4 I think that a purchaser of a computer would look at  
5 that and say to themselves, "I want to know." That would be  
6 important information.

7 THE COURT: Are you saying that you have alleged or  
8 can allege that Intel knew about that before it was disclosed  
9 in 2017 by Google Project Zero?

10 MR. SEEGER: And we absolutely allege that in the  
11 complaint. We allege it by pointing to their patents that  
12 anticipate the problem we are now talking about. We do it by  
13 talking about White Papers that were available to the company.  
14 We referenced manuals that go back -- Intel manuals to  
15 programmers that go back to 2014, maybe 2012, discussing this  
16 particular problem. Yes, we absolutely allege in the  
17 complaint, and I think very clearly, that Intel knew about it  
18 before 2017.

19 THE COURT: And for purposes of both standing as well  
20 as basic whether the computer is fit for its ordinary purpose  
21 or there is a fundamental flaw, how does one distinguish  
22 between, yes, they knew of that as a theoretical vulnerability,  
23 and even until 2017 there hadn't even been a laboratory proof  
24 of concept, and as of right now there is a laboratory proof of  
25 concept, but we don't know if it ever has been done or even

1 could be done beyond this proof of concept.

2 How does the law decide at what stage this  
3 theoretical vulnerability has to be disclosed and what's the  
4 extent of the required disclosure?

5 MR. SEEGER: I think that what the law should look at  
6 is what Intel knew and when they knew it, and we don't have  
7 that discovery. We have just alleged that in the complaint,  
8 but we believe we have adequately alleged that -- we have  
9 reason to believe that Intel knew -- and not should have  
10 known -- knew of the potential defects well in advance of 2017.  
11 And we think that's when the issue should have come to light.

12 THE COURT: What I'm struggling with is to  
13 understand, when you say "defects," what I'm hearing from Intel  
14 is that these were -- and even maybe from you -- is that these  
15 were certainly theoretical flaws that may or may not be able to  
16 be exploited. And now as of 2017 we have some analysis that  
17 shows, yeah, under the right circumstances, they could be  
18 exploited, but we don't know how likely those circumstances  
19 are.

20 At what stage does the law say your failure to  
21 disclose all of that is actionable? How do we decide that?

22 MR. SEEGER: I think that the answer to that,  
23 Your Honor, is when Intel became aware that these defects could  
24 be exploited, they had an obligation to inform the consuming  
25 public of it. The reason is -- and it doesn't relate to

1 whether we know for sure somebody has been hacked. As I said,  
2 our allegations right now, and we believe the discovery is  
3 going to show that there is no fingerprint here, and these  
4 hackings could be going on all over the place, and you wouldn't  
5 know.

6 But what we do know about this case is that Intel is  
7 requiring everybody with an Intel chip to download protections  
8 that disable core functions of its microarchitecture. Just one  
9 example of why this is important, Your Honor: Hyperthreading.  
10 That is a core feature of a processing chip. One of their  
11 recommendations is basically to disable that so you can't run  
12 multiple programs. I mean, that's a core feature of their  
13 product. Once it is disabled, the impact will be substantial.  
14 We've alleged up to 30 percent performance --

15 THE COURT: Let me go to something you said about a  
16 minute ago, and that was when they knew about it, they had a  
17 duty to disclose to the consuming public.

18 Is there a distinction between a duty to disclose it  
19 to the end users in terminology that your end users might be  
20 able to understand versus simply to disclose it to the  
21 marketplace? In other words, to disclose it to the  
22 manufacturers: The Dells, the Lenovos, the HPs, to the  
23 academic community, to the professional industry conferences?  
24 If they disclose it there, why isn't that sufficient, given  
25 that the likelihood of an individual consumer understanding



1 that doesn't seem to be particularly plausible to great.

2 MR. SEEGER: And here is why: Because they chose to  
3 market their important component part directly to the consuming  
4 public. They took their case to them, and I can give you an  
5 analogy to another area of the law, not totally on one point,  
6 but it is just one way to think about it.

7 When pharmaceutical companies advertise directly to  
8 consumers, they take the doctor out of the picture. In most  
9 personal injury cases, the doctor reading a label is a defense.  
10 In most courts they lose that defense when they take their case  
11 directly to the consuming public. I think that's a very  
12 analogous situation right there. If the component part  
13 manufacturer is saying, "Buy a computer with Intel inside,  
14 because we are the best, we are the fastest, we are the  
15 greatest," that's who you need to be communicating with. You  
16 can't start the discussion and end it when you feel like it,  
17 which is, "Oh, and by the way, we won't tell you about our  
18 defects; we will just tell Dell," which there is no evidence  
19 that they did. I am just working on the hypothetical.

20 THE COURT: All right.

21 MR. SEEGER: Your Honor, I will move on to consumer  
22 fraud, if that's okay, and then that will leave time for  
23 Rosemary. I have taken up a lot of time.

24 So Intel says we can't make a claim for fraud by  
25 omission. I believe that we have adequately alleged that.

1 Plaintiffs' claims under the CLRA, FAL, and the fraudulent  
2 prong of the UCL are governed by the reasonable consumer  
3 standard, which looks to whether a defendant's practices would  
4 deceive an objective, reasonable consumer. Whether a  
5 reasonable consumer is likely to be deceived is a question of  
6 fact, Your Honor.

7           The CLRC, FAL, and UCL claims may be based on  
8 misrepresentations by omissions. There is plenty of law on  
9 that. Hodsdon is one of them.

10           The elements of a fraudulent omission claim under  
11 these statutes, are the same as common law fraud.

12           THE COURT: So when I analyze those statutes, under a  
13 theory of omissions, do we then also implicate the Wilson  
14 standard for the duty to disclose, which seems to require some  
15 safety defect?

16           MR. SEEGER: Your Honor, I think that the current law  
17 in the Ninth Circuit is pretty clear, and it is stated in  
18 Hodsdon, which is that the defect has to be material, meaning  
19 it would have to be something that's important to the consumer,  
20 and it has to relate to a central function.

21           Then you need one of the LiMandri factors, which  
22 we've alleged two. I heard you in questioning Mr. Katz -- I  
23 think you were a little on the wall with regard to one of the  
24 factors that we alleged, active concealment.

25           THE COURT: Yeah. Where is the active concealment?

1 I must have missed it.

2 MR. SEEGER: Your Honor, it is not that you missed  
3 it. We have it in our -- I'll point you to the complaint.

4 THE COURT: Are you saying it is the statement that  
5 there is no such thing as perfect security?

6 MR. SEEGER: No.

7 THE COURT: Then you can tell me what's the active  
8 concealment.

9 MR. SEEGER: If you don't mind, I'll skip ahead.

10 THE COURT: Okay.

11 MR. SEEGER: Active concealment is on page 49 of the  
12 PowerPoint we gave up to you. We've alleged Intel actively  
13 concealed that its CPUs gave unauthorized program instructions,  
14 access to protected data, and failed to completely undo  
15 mis-speculation. So that does relate to the defect, but that  
16 would be -- our view is they actively concealed that  
17 information.

18 THE COURT: One moment. Here is what I understand to  
19 be active concealment, and I base this in part on my Premera  
20 opinion, plus the cases in there, that you actually have to do  
21 something that, if you will, send someone looking in the wrong  
22 direction, on a wild goose chase; or if there's a vulnerability  
23 or defect here, you have to cover it up and disguise it so they  
24 won't see it. That's my understanding of what active  
25 concealment is. It requires one of those two: Either go look

1 somewhere else, or I'm going to cover up the concealment. You  
2 can have either one.

3 What did they do here that fits within that  
4 description?

5 MR. SEEGER: I think what we are alleging fits more  
6 in -- advertising their product as secure to the core; one of  
7 the safest; that our safety protections extend into the  
8 hardware. Those kind of representations, I think, were, in our  
9 view, active concealment.

10 THE COURT: I might understand it if you said,  
11 "That's a misrepresentation or a half-truth," although then we  
12 would be getting into a little bit of the law on puffery and  
13 objectively verifiable or refutable statements.

14 Where is the concealment part? If they say that  
15 their processors are among the safest in the world, okay, maybe  
16 that's not really true. It is a little puffed. Maybe it is a  
17 half-truth. Okay. But where is the active concealment? Where  
18 are they making it more difficult for someone to learn what the  
19 omission is or what the defect is?

20 MR. SEEGER: Okay. Your Honor, if the question is  
21 what have they affirmatively done to make it more difficult to  
22 find it, I would say we probably have not alleged that in the  
23 complaint in a way that would answer the question.

24 THE COURT: Okay. And I'll agree with that.

25 MR. SEEGER: I think that if you wanted us to, we

1 could probably -- I think maybe even after we get some  
2 discovery, we might need for that.

3 THE COURT: Okay. Then move on to active  
4 concealment.

5 MR. SEEGER: I mean, for the purpose of -- we only  
6 need one of the LiMandri factors --

7 THE COURT: I agree.

8 MR. SEEGER: -- so why fight on the second one?

9 THE COURT: Okay.

10 MR. SEEGER: But exclusive knowledge of the defects,  
11 I think we've discussed that. We've alleged in the complaint  
12 that the defects -- that they knew about them; that they had  
13 exclusive knowledge concerning the hardware design; deferred  
14 privilege checks; permitted unauthorized memory access, and  
15 thus compromised security to achieve it.

16 THE COURT: So where's the evidence and/or plausible  
17 allegation that they had the exclusive knowledge, in light of  
18 all of the things that were said to the academic conferences,  
19 the White Papers, and even the patent filings?

20 MR. SEEGER: That they had exclusive knowledge?

21 THE COURT: Yes.

22 MR. SEEGER: Well, first of all, nobody has access --  
23 as far as I know, to this day, nobody has access to their  
24 algorithms and the information that they have. I think that  
25 what the academic community does is they kind of try to

1 reverse-engineer this. In terms of exclusive knowledge -- more  
2 importantly, only Intel knew about Flaw 1. Flaw 2, maybe -- if  
3 you look at the papers, I think they are focused more on when  
4 speculation execution is undone. They don't undo the values  
5 that they put in the cache. But Flaw 1, I don't think any of  
6 those papers that we allege in our papers, or anything that  
7 Mr. Katz has said, indicates that somebody else knew about that  
8 other than Intel.

9 THE COURT: Okay.

10 MR. SEEGER: I could go into the duty to disclose,  
11 Your Honor.

12 Do you want me to go through that?

13 THE COURT: Well, one of the threshold points on the  
14 duty to disclose is the central functional defect.

15 MR. SEEGER: Right.

16 THE COURT: And let me tell you this and figure out,  
17 how do I apply this? I'm not going to make myself a witness in  
18 this case, but I'll say this: Okay, I've now gone through  
19 your -- both sides' tutorial. I probably now understand what  
20 the alleged defect and flaw is better than anybody other than  
21 the technical people out there in the industry.

22 Let me rephrase this. The lawyers in this case  
23 understand it much better than I do. The technical people in  
24 the industry understand it much better than I do. I probably  
25 understand it now better than your average typical consumer,

1 not your specialized technology geek, but your typical  
2 consumer.

3 Now that I understand it, if my computer crashes and  
4 dies or I lose it or something, would I have the slightest  
5 hesitation buying a new one? No.

6 What do I do with that fact?

7 MR. SEEGER: I'm surprised you say that, Your Honor,  
8 to be honest with you.

9 THE COURT: Maybe I'm just wrong and maybe I don't  
10 really understand the flaw. I see the theoretical  
11 vulnerability here. And maybe it is also because now that I  
12 live my life as a federal judge, everything that I do out in  
13 the community I assume the news media is watching. By the way,  
14 I know they are not. But everything I do I assume could end up  
15 front page news, and I act accordingly. So I now lead a very  
16 boring life.

17 But I assume that we are vulnerable being hacked in  
18 the courthouse. And notwithstanding our security measures  
19 here, there is a theoretical possibility that we can be hacked  
20 here, and I could be hacked at home on my computer at home. I  
21 just live with it. I deal with it. I, frankly, ignore it.

22 So how does this flaw show that there is a central  
23 functional defect with this product?

24 MR. SEEGER: Your Honor, first off, I'm actually not  
25 surprised -- and I know that you're trying to trigger some

1 discussion here. I wonder if you really would go out and buy  
2 another Intel computer knowing that AMD doesn't have a Meltdown  
3 and Foreshadow problem, and you're going to pretty much get  
4 similar performance. I'm not questioning you on that so --

5 THE COURT: Let me ask a really basic fundamental  
6 question and show how little I know.

7 Are Intel processor chips in Apple MacBooks?

8 MR. SEEGER: They are, yes.

9 THE COURT: Okay. Because my kids recommended an  
10 Apple MacBook for my home computer and said that's the best to  
11 work with, and I think I remember seeing one of those little  
12 Intel logos on that. That computer has worked out just fine  
13 for me, and I really do think if I were to lose that computer  
14 or it were to break for reasons that have nothing to do with  
15 this case, I would probably buy a new one, just the same kind.

16 MR. SEEGER: Well, you say it has worked out fine for  
17 you, but I don't think you would feel that way, Your Honor, if  
18 you found out that your bank account information and your  
19 Social Security number and your password are sitting with  
20 somebody else, who might have come in through one of these  
21 exploits.

22 THE COURT: I agree. But there are also so many  
23 other ways in which it could have come in too. I get a call  
24 probably every two or three days telling me that they're either  
25 from Microsoft security, that my computer has been hacked, and



1 I need to log into this particular website, and they will fix  
2 it for me.

3 MR. SEEGER: But can I separate that out a little  
4 bit?

5 THE COURT: Yes.

6 MR. SEEGER: So you have got one instance where you  
7 have bad guys out there trying to get people's information, and  
8 they figure out all kinds of ways to do that. That's a problem  
9 that we all have. But in this case you have a computer chip  
10 manufacturer who planted the defects, put the defects in the  
11 chip so that they could make a faster processing system,  
12 knowing that those defects were problematic at the time.  
13 That's our allegation in the complaint.

14 Look, this is a pre-discovery case --

15 THE COURT: Yeah, I understand.

16 MR. SEEGER: But we believe these allegations will be  
17 borne out.

18 THE COURT: What does the law tell me in terms of how  
19 I define a central functional defect so I can then look at the  
20 fact in this case and say do we have an allegation of a central  
21 functional defect?

22 MR. SEEGER: I think it goes to really what the core  
23 feature in a product; you know, an engine in the car that we  
24 talked about, BMW, where the engine had issues. It smelled.  
25 It gave off all kind of sounds. That sounds like something

1 that relates to an engine in a car. It sounds to me like it  
2 would be a central function. I could see a court saying that's  
3 a central function.

4 THE COURT: And I find that true with my computer.  
5 My computer still does all the things I want it to do.

6 MR. SEEGER: I think of it like this: I'm staying at  
7 a hotel a couple of blocks away. I lock my door. There is a  
8 safe there. I put my watch in the safe. I assume that when I  
9 do that, it's safe. I don't think that there are going to be  
10 people from the hotel who are going to come in, know the code,  
11 and take my stuff.

12 I think that's a pretty important feature. Security  
13 in a CPU, security in a computer chip, is really everything.  
14 So why would anybody knowingly put their most private  
15 information into a computer's memory knowing somebody can  
16 access through the CPU and get it?

17 THE COURT: So following up your analogy to the hotel  
18 room, and I think it makes sense. One would normally think of  
19 the central functional purpose of a hotel room to give you a  
20 good, clean place to sleep at night. But if you knew that this  
21 particular hotel had rampant theft going on either from  
22 employees or from outsiders that they let in so that you had  
23 heard so much about people breaking into rooms, or when the  
24 guest isn't there, stealing stuff from them, you wouldn't use  
25 that hotel anymore.

1 MR. SEEGER: That's correct.

2 THE COURT: Okay. So security in that respect could  
3 be a central functional defect for that hotel.

4 But now what do we do with the fact that people  
5 continue to buy Intel chips and Intel processors, and, if  
6 anything, it looks like their sales are going up?

7 MR. SEEGER: Your Honor, grant the injunctive relief  
8 we asked for, we will get notice out to the consumers, and we  
9 will see if that's true. I really do not believe to my essence  
10 that a consumer who understands that there is another computer  
11 chip manufacturer that doesn't have this Flaw 1 problem of  
12 returning real values -- remember, AMD returns a dummy value to  
13 transient instructions. And when speculation is wiped out, the  
14 real value stays where it is. Nobody has access to it. This  
15 company has a whole big problem with this.

16 So I have a hard time believing consumers, if they  
17 really knew, wouldn't make the right choice in that situation.  
18 In any event, Your Honor, in the complaint we have at this  
19 point, that's what we allege.

20 THE COURT: So what you are telling me is you have  
21 alleged central functional defect. Whether or not you can get  
22 past summary judgment and whether or not you can persuade a  
23 jury that this flaw or these flaws is essential functional  
24 defect remains to be seen, but you are telling me you've  
25 adequately alleged it.

1 MR. SEEGER: I believe we have.

2 THE COURT: I understand.

3 MR. SEEGER: On reliance, as you know, in the  
4 Ninth Circuit, if it is a material omission, reliance is  
5 presumed. In any event, I believe we've alleged adequately in  
6 the complaint that had our consumers known this information, it  
7 would have been important to them, and I believe that's how  
8 materiality is generally defined; information that would have  
9 been important to the consumer. They would have paid less or  
10 not purchased at all.

11 Then on the constructive fraud, Your Honor, I think  
12 the big issue here is you've heard our arguments on omission,  
13 reliance, damages. The big issue is the confidential  
14 relationship. Intel says we haven't pled it. We  
15 believe that -- well, we don't believe -- the cases say that a  
16 confidential relationship is a fact issue, whether or not one  
17 has been created, and so it is not really appropriate for a  
18 motion to dismiss.

19 THE COURT: But tell me what facts have you alleged  
20 that would plausibly show a confidential relationship exists?

21 MR. SEEGER: Well, again, it is not on the screen  
22 here. And on the screen we are showing you the complaint  
23 references that we believe answer the question you just asked.  
24 But in addition to that, and this is also in the complaint, it  
25 is the fact that this company chose to take this marketing

1 campaign directly to the consumers. It was all designed to  
2 create comfort and to believe that their chips were the fastest  
3 and as secure as anyone else. In addition to that, we put  
4 allegations in the complaint that say plaintiffs were  
5 vulnerable to Intel; reasonably relied upon it to make full  
6 disclosure regarding the security of its CPUs.

7 THE COURT: I am worried about the implications of  
8 that argument so that when a manufacturer markets to consumers  
9 and tries to persuade consumers of certain things and allegedly  
10 or arguably the manufacturer doesn't tell the consumers  
11 everything, that might be sufficient to create a fact issue on  
12 whether or not there is a confidential relationship between  
13 that manufacturer and that consumer, the implications of that  
14 worries me, because there are a lot of legal consequences to  
15 being in a confidential relationship with someone that would be  
16 very different from normally the situation of an arm's length  
17 seller and buyer.

18 MR. SEEGER: I understand --

19 THE COURT: Anything you can say to make me feel more  
20 comfortable.

21 MR. SEEGER: Yeah, I can. I think it really depends  
22 on what the information is that is withheld. It depends on  
23 what type of relationship that has been created between a  
24 manufacturer of a product and an ultimate buyer. "Secure to  
25 the core," Your Honor, is a pretty powerful statement.

1           I think companies have to be held accountable for  
2 what they say to the public. There is puffing and then  
3 there's -- that's not a puffery statement, in my view. That's  
4 at least saying, at a minimum, that your secrets are as  
5 protected with us as anyone else.

6           THE COURT: But as I read in your memo in opposition,  
7 you've abandoned the theory of affirmative misrepresentation.

8           MR. SEEGER: I know, but for the most part -- I don't  
9 want to preempt anything that Rosemary has to say. I am really  
10 trying to respond to the question that you are asking about the  
11 confidential relationship, and I think it starts with the  
12 marketing campaign to consumers.

13           THE COURT: I have no problem holding speakers  
14 responsible for affirmative misrepresentations, assuming they  
15 dot the I's and cross the T's, and they really are  
16 misrepresentations. But saying then that those  
17 misrepresentations create a confidential relationship with all  
18 the legal baggage that that would bring along still gives me  
19 concern.

20           Okay. Where do you want to go next?

21           MR. SEEGER: I'm just trying to -- I think the Frye  
22 case -- and to be honest with you, I have to tell you I was  
23 really impressed with Mr. Katz's ability to remember all of  
24 those cases and all the details on them. I was going to  
25 compliment him about it outside in the hallway, but I will do

1 it here.

2 I don't remember all of the details of the Frye case,  
3 but I do remember that in that case there is a pretty adequate  
4 discussion of what -- the fact that the confidential  
5 relationship is a question of fact. I believe there it was  
6 representations made by wine sellers to purchasers of wine,  
7 which I don't think are any -- I think if the Court in that  
8 case found a confidential relationship, I think it we would  
9 be --

10 THE COURT: But wasn't that the case where they  
11 promised "sign up with us, and we won't give your information  
12 to anybody else." And in exchange for that signing up, people  
13 gave some confidential information to the defendant. I thought  
14 that the issue there was a confidential relationship was  
15 developed because I said to you, "You give me your confidential  
16 information, and I will protect thus and such," and that was at  
17 least a fact issue of whether we had a confidential  
18 relationship. We don't have that here, do we?

19 MR. SEEGER: So thank you for reminding me of the  
20 fact pattern, Your Honor. I was looking for my notes on it. I  
21 think it was a very similar situation. By telling consumers  
22 that this computer chip is secure to the core, that you're as  
23 safe as others, people are trusting that manufacturer of the  
24 CPU with their secrets. Now, they're not uploading them in the  
25 same way that you would to the wine club, or whoever the

1 defendant was.

2 THE COURT: Right.

3 MR. SEEGER: There is a difference in that respect.  
4 But they are still being trusted to protect people's most  
5 private information, their account information, passwords, and  
6 all of that stuff.

7 THE COURT: When I buy a door lock from a hardware  
8 manufacturer, I hope it will work. I hope it will be secure.  
9 But I'm not entering into a confidential relationship with that  
10 manufacturer.

11 MR. SEEGER: No. But if you buy a safe from a safe  
12 manufacturer, and you put your jewels in the safe, you don't  
13 expect somebody to just come along, turn it once, and open it  
14 up.

15 THE COURT: I totally agree. But I'm still not  
16 entering into a confidential relationship with the manufacturer  
17 of the safe.

18 MR. SEEGER: Well, I mean, it would depend on what  
19 the safe manufacturer said to you to get you to buy the safe.

20 THE COURT: "We have got the best safes around.  
21 They're impervious." I might sue them for breach of implied  
22 warranty, breach of express warranty, breach of contract,  
23 fraud. But I still haven't entered into a confidential  
24 relationship with them.

25 MR. SEEGER: Well, I also think, and what we've



1 alleged in the complaint, it goes beyond that. It was the  
2 withholding of this material information about the product.

3 THE COURT: Okay.

4 MR. SEEGER: Your Honor, I'm going to hand it off.

5 THE COURT: Very good.

6 THE COURT REPORTER: Judge, I need a break.

7 THE COURT: How much time do you want?

8 THE COURT REPORTER: Ten minutes.

9 THE COURT: All right. So we'll take a ten-minute  
10 recess. Then we will pick up with implied warranty and  
11 Ms. Rivas.

12 (Recess.)

13 (Open court; proceedings resumed:)

14 THE COURT: Picking up where we left off -- and  
15 either of you can answer this or both of you. Picking up where  
16 we left off, when I was telling you about sort of my reaction  
17 about still using Intel processors in my computer, and you  
18 expressed some surprise, it seems to me a more realistic and  
19 appropriate legal test is, what are the plaintiffs doing? I  
20 don't think I saw in the amended complaint an allegation that  
21 now that the plaintiffs know about this flaw, they are no  
22 longer using their computers that have the Intel processors.

23 What does that absence do to the element that  
24 requires basically a core functional defect?

25 MR. SEEGER: I don't think it does anything,

1 Your Honor. The reason I say that is because, remember, all of  
2 these people, like everyone else who has an Intel chip, are  
3 being told to download patches. I think they feel safe right  
4 now. Just like, Your Honor -- I am just using you because  
5 you've talked about your computer. You may have downloaded all  
6 of the patches --

7 THE COURT: Not intentionally. Whatever those --

8 MR. SEEGER: But you are okay with the performance  
9 impact, because to you personally what you are doing, you know,  
10 you notice it, but you are not crazy about it. My point is,  
11 though, I think that all of the -- I think that the consumers  
12 are doing what they are being told. They are downloading  
13 patches, and they think that's what they have got to live with,  
14 just like when you get those updates on your iPhone.

15 THE COURT: So what does that do to this argument of  
16 central functional defect?

17 MR. SEEGER: It doesn't change it.

18 THE COURT: Why is there a central functional defect?  
19 It is like, well, before the community knew about this problem,  
20 the community didn't know about this problem, or we didn't know  
21 about the proof of concept. Now that we do, there are patches.  
22 The patches slowed things down. Nobody is stopping using their  
23 computer, or at least the plaintiffs haven't alleged that  
24 they're stopping using their computers or that they can't use  
25 their computers.

1           So where is the central functional defect?

2           MR. SEEGER: First of all, it is a two-part answer.  
3   The central defect is the fact that the CPUs aren't secure.  
4   They fixed that, right? They say they fixed it. We don't  
5   think it is fixed. We think the only fix is really a hardware  
6   fix.

7           But they say we have mitigated that problem with the  
8   patches, and so maybe that's not the big problem, and right now  
9   the big problem is that everybody who is downloading those  
10   patches do not have the processing speed that they were told  
11   they would get when they bought the best.

12           Now, can I do this by way of -- for a little bit? I  
13   believe it is the Chrysler-Jeep Ecodiesel case, a case that I'm  
14   very familiar with. It was the Volkswagen clean diesel case.  
15   I want to do this by example of that because I think in that  
16   case they're cars.

17           The problem was they had cheat devices. You could  
18   drive it like a car. You could brake like a car. You could  
19   speed up. But when the cheat device kicked in, it polluted.  
20   What people were sold in those cases were a car that was  
21   supposed to be green. It was supposed to be clean. And they  
22   didn't get what they paid for. I think that was important in  
23   the Chrysler-Jeep Ecodiesel case. There is no opinion in the  
24   Volkswagen clean diesel case because it settled, clearly.

25           So again, the concept of central function kind of has

1 to relate to: What is the consumer expecting when they are  
2 buying the product? I can't believe that a consumer who buys  
3 an Intel CPU thinks that by getting the best processor on the  
4 market that they are open to these security defects. Or they  
5 will fix their defects, but now you don't have the Intel  
6 processing speed that you thought you bought. So the consumer  
7 is hurt either way.

8 THE COURT: Well, they may be hurt. But are they  
9 hurt by a "central functional defect," as that phrase has been  
10 defined in the law? They may not have gotten the full value of  
11 what they were hoping to get. I get that.

12 But to the extent that a plaintiff has to prove a  
13 central functional defect, either as part of a duty to  
14 disclose, or as we will get to in implied warranty, how are we  
15 giving any real meaning to that phrase if we say, "Well, it's  
16 slower than you were hoping for. The process is slower than  
17 what you were hoping for, but you are still using it. You are  
18 still buying new ones."

19 MR. SEEGER: Here is the answer to that, Your Honor,  
20 and I could probably scroll through the cases and find some  
21 language before we are out of here today. But in the one  
22 instance -- so there could be more than one central function to  
23 something. In the one instance, it's security. So while  
24 they're unfixed, unmitigated, and unrepaired, there's a  
25 security defect that does go to -- is a central feature of a

1 CPU, which is processing and security. I don't think any  
2 consumer thinks otherwise.

3 Then they have patches that come along and fix it,  
4 and now they've impacted the central function of processing  
5 speed, which is exactly what they thought -- anybody who buys  
6 an Intel chip, who is told buy "Intel Inside," believes that  
7 they are getting a state-of-the-art/top-of-the-line processors.

8 THE COURT: I get, to the extent that you are saying  
9 there that they are not getting what they paid for, I  
10 understand that allegation. But I don't see how that satisfies  
11 the element of central functionality, because they're still  
12 willing to use their patched processor. They are still working  
13 with it as a computer. Nobody has alleged, "Based upon these  
14 flaws and/or these slowdowns or these diminutions in  
15 performance, I'm no longer using my computer with Intel  
16 inside." I could see why they might be upset; why they might  
17 say that they didn't get what they paid for.

18 But how is it a central functional defect if they are  
19 still using it?

20 MR. SEEGER: Your Honor, I think that you look at the  
21 sale at the time -- you look at the product at the time the  
22 consumer buys. It is the point of sale. The central function  
23 of a CPU when they bought it was processing speed and security.  
24 I don't mean to repeat myself, but I think it is really  
25 important. I think this is a point-in-time question. So when

1 they bought their Intel CPUs, they believed that they were the  
2 best processing speed and they were secured. They didn't get  
3 security. Now they are getting patches to fix that central  
4 function, and those patches are causing a problem. So I'm  
5 taking a crack at this from another way. I can tell from your  
6 face that you are not sure.

7 THE COURT: I'm struggling with what both sides have  
8 said. Sometimes I completely agree with what both sides have  
9 said -- not on the same point usually -- and other times I am  
10 skeptical about what both sides have said. And I am still  
11 struggling with this. I will assure you, I'm not ruling from  
12 the bench.

13 MR. SEEGER: One last thought: I know in many  
14 respects I am referring to a case that you are not going to  
15 find a written opinion on what I am about to say, so I  
16 apologize for that, but I do think it is instructive. And if  
17 we are struggling, I think it is a good example to think about.

18 But the Volkswagen case is a very good one. The  
19 argument could be made you still have a car. The car is  
20 polluting, but you still have a car that does everything a car  
21 does. And there's a company that ultimately agreed to buy back  
22 cars and modify them. And cars that were modified that  
23 impacted performance, consumers got cash on top of it. I  
24 understand that I am referring to a settlement and not  
25 something that is going to necessarily help you.

1 THE COURT: And maybe that's one of the reasons why  
2 that case settled. If the plaintiffs in that case had to prove  
3 that the non-pollution feature was a central functional aspect,  
4 could they do it? I don't know. And maybe that uncertainty  
5 led to settlement.

6 MR. SEEGER: I think we clearly could have done that  
7 because it was such a big part of the campaign and the reason  
8 why those people bought those cars. They did want a green car.  
9 People buy Intel for a reason.

10 THE COURT: Okay. Thank you.

11 Ms. Rivas, welcome and thank for your patience.

12 MS. RIVAS: Your Honor --

13 MR. SEEGER: Your Honor, I'm sorry.

14 THE COURT: I'm letting you fight this one out. I'm  
15 staying out of it.

16 MR. SEEGER: I am sorry to Rosemary, Your Honor, but  
17 you got my head spinning. There was an opinion just issued  
18 last week. I didn't send it in because I didn't recognize it.  
19 It is in the Mercedes BlueTEC Litigation, Judge Linares,  
20 District of New Jersey, and the allegation that involves  
21 Mercedes cars with this diesel problem. The allegation there  
22 of standing. The Third Circuit doesn't have this central  
23 function test, I think, the way the Ninth Circuit does. I  
24 think that's a case that would be very helpful.

25 THE COURT: Thank you, Mr. Seeger.

1 Ms. Rivas.

2 MS. RIVAS: Your Honor, just to add to a little bit  
3 of this dialogue, the law doesn't require that you throw your  
4 car away or that you stop using your car or that you stop using  
5 your device, if it's an iPhone that you pay now \$1,000, or  
6 whatever. That's not what the law requires. And as Mr. Seeger  
7 said, these products have multiple functions, multiple-function  
8 central functions.

9 So I'll now go back to my argument. I just wanted to  
10 say that.

11 We prepared some slides, but I'm obviously not going  
12 to go through all of them, because during your discussion with  
13 defense counsel, you honed on a few things. One, the  
14 third-party beneficiary requirement --

15 THE COURT: And where have you pled that in the  
16 complaint?

17 MR. SEEGER: Well, that's what I'm going to get to.

18 THE COURT: Okay.

19 MR. SEEGER: Your Honor, I think In re Sony Vaio  
20 Notebook Trackpad Litigation -- the cite is 2010 WL 4262191.  
21 The Court said that you can't get away with just making legal  
22 conclusions, and you can draw reasonable inferences. And  
23 that's what the Court did with regard to the third-party  
24 beneficiary.

25 THE COURT: So which contract does plaintiff contend



1 they are a third-party beneficiary to? Oh, I just ended a  
2 sentence with a preposition.

3 MS. RIVAS: You can infer from the allegation that  
4 Intel has asked the OEMs to include on all computers the label  
5 "Intel Inside." You can infer that there is a contract there,  
6 I think.

7 Beneficial? Does it benefit the consumers? I think  
8 you can infer that as well. If Your Honor thinks that we can't  
9 infer that from what we have, I think we can amend, and we can  
10 certainly include those allegations.

11 THE COURT: Therefore, for a third-party beneficiary  
12 analysis, do we have to get down the line of whether someone is  
13 an incidental or intended third-party beneficiary?

14 MS. RIVAS: I think incidental is enough, but I think  
15 here the consumers are more than incidental. I think that  
16 Intel is selling its chips to the OEMs, to retailers who sell  
17 the chips, precisely so that they go to consumers. They are  
18 not selling them so that Best Buy can use them on their  
19 computers. It is intended so that the consumers will buy them  
20 and use them. I think that's why you can infer that and why it  
21 is even more than incidental, Your Honor.

22 THE COURT: Would it create a problem under this  
23 theory if a contract between an OEM and Intel contains a  
24 provision that this contract does not create any third-party  
25 beneficiaries?

1 MS. RIVAS: I don't think it would, Your Honor. I do  
2 think that all the cases on this issue, third-party  
3 beneficiary, they haven't examined it as closely as you're  
4 asking. They haven't asked, "Well, what does the contract  
5 say?" From what I know, none of the cases say exactly that.  
6 But I think a party could just put boilerplate in, and you have  
7 to look at whether it really does benefit the consumer or not,  
8 and I think there is case law to support that.

9 THE COURT: Okay. So let's assume you get past the  
10 vertical privity issue. How do you state a claim for implied  
11 warranty?

12 MS. RIVAS: It kind of connects with what you've been  
13 talking about with Mr. Seeger. I want to go through some  
14 principles that I have been able to discern from the cases when  
15 you are looking at is a product fit for the ordinary purpose of  
16 its use.

17 One of the principles is you have to consider what  
18 the reasonable consumer would think. That's the Carrier IQ  
19 case. That's the case where it was the mobile devices -- and  
20 this is an industry-wide issue, because I was on that case. It  
21 was an industry-wide issue basically that the wireless phone  
22 manufacturers were putting software on all the phones so that  
23 any data, like texts and calls would get transmitted to third  
24 parties.

25 The Court there looked at what a reasonable

1 consumer's expectation is and said that a phone is not just for  
2 calling and texting. It is to do -- one of the things that a  
3 consumer would expect is that would be done privately and that  
4 you wouldn't send that information off to a third-party. So  
5 that's the first principle.

6           The second principle is that a defect does not have  
7 to render a product completely useless. And that's important,  
8 because in Carrier IQ the phones weren't rendered completely  
9 useless, and people continued to use them. But that didn't  
10 have any bearing on whether the implied warranty of  
11 merchantability was breached.

12           And an example -- I think it was defense counsel gave  
13 this -- was a moldy bed. You can still sleep in a moldy bed,  
14 but a consumer wouldn't expect it to be moldy, and it just goes  
15 against the argument that you would drill down the purpose to  
16 its basic essence.

17           That goes into my third principle, and I've probably  
18 already said it. But when you are looking at what's the  
19 purpose, you don't reduce it to its bare minimum. So with a  
20 car, a car's purpose isn't just to provide transportation from  
21 A to B. The purpose of a car is to provide safe and reliable  
22 transportation, and that is how the Courts have looked at it.

23           THE COURT: And so if we apply that here, I get that  
24 even if a car runs, if you know it is unsafe, you are not going  
25 to want to drive it. Even if a bed that's moldy can support

1 your body while sleeping, you are not going to want to sleep in  
2 it. I get it. And you're probably right; it would get back to  
3 what would a reasonable consumer think and want.

4           How do I deal with my skepticism that a reasonable  
5 consumer who was aware of, especially Flaw 1 would say, "I  
6 don't want an Intel chip." Now, maybe the skepticism comes in  
7 by you telling me, "Well, we've pled it. It is plausible. If  
8 we can't create a genuine issue on that, we will lose at  
9 summary judgment. If we can create a genuine issue, but we  
10 can't persuade a jury, we will lose at jury trial. But we have  
11 pled it, and that's good enough."

12           Is that right? And now, how has the landscape  
13 changed under a plausibility framework?

14           MS. RIVAS: I guess I'm not understanding your  
15 question, Your Honor.

16           THE COURT: Well, we talked about the 18 people or so  
17 that bought new computers. I understand Mr. Seeger's response,  
18 "Well, yeah, now that the patch is out." I think I'm beginning  
19 to understand the basic vulnerability here, but I just don't  
20 see how it is analogous to a moldy bed or an unsafe car or even  
21 a smelly car. It is a theoretical risk that bad guys can get  
22 into my computer through a side channel.

23           MS. RIVAS: Your Honor, I think you are assuming that  
24 it is theoretical, and I don't blame you for saying that,  
25 because defendants have said that I don't know how many times.

1 That's in dispute whether it is theoretical or not.

2 I would also say that, by all indication, it is not  
3 theoretical. They are redesigning their chips. They're  
4 changing the hardware. They have issued all of these patches.  
5 They've worked with industry members to roll out these patches.  
6 They're telling people that you need to download these patches.

7 THE COURT: How is that probative that it is not  
8 theoretical? It is like if they've discovered a theoretical  
9 way to exploit the security in the chip, and they want to  
10 prevent it, fine, good. But how does the fact that they are  
11 trying to prevent it from being exploited in any way probative  
12 on the issue that at this time it is not anything more than  
13 theoretical?

14 MS. RIVAS: I think it is highly probative.

15 THE COURT: How?

16 MS. RIVAS: Because the industry and a company just  
17 doesn't take action for whatever reason, and they don't just  
18 redesign their chips because it is theoretical.

19 Look at the car case with the hacking. The industry  
20 hasn't changed the way their electronic systems are working.  
21 They haven't changed it, and that was a speculative risk that  
22 the Court found, but you don't hear the industry doing anything  
23 about that risk.

24 I would also say that the massive performance impact  
25 indicates that it is not -- well, not massive -- but there is a

1 dispute as to what it is. But the performance impact, they're  
2 redesigning all of their chips, they are issuing all these  
3 patches, even though that's impacting these chips. It is  
4 impacting all sorts of companies that use their servers and  
5 whatnot.

6 THE COURT: So your argument, if I understand it  
7 correctly, is that, among other things, because the patches and  
8 the corrections are having a significant degradation of  
9 performance, as plaintiff alleges, they would not be incurring  
10 those degradations of performance if it wasn't more than a  
11 merely speculative or theoretical risk?

12 MS. RIVAS: Yes, Your Honor. We don't have a smoking  
13 gun at this point -- and we may never get one -- but we haven't  
14 gone through discovery.

15 THE COURT: I think Mr. Seeger may have mentioned  
16 that.

17 MR. SEEGER: Many times. (Laughter.)

18 MS. RIVAS: So at this point it is a factual dispute  
19 that shouldn't be resolved on the pleadings, Your Honor.

20 I will also say that the fact that -- and maybe I'm  
21 repeating myself -- but the fact that they are redesigning  
22 their chips lends itself to our position that these chips  
23 weren't fit to provide safe computing.

24 Going back to the purpose, the purpose isn't just for  
25 computing. People use computers to store confidential

1 information. People use computers to compute safely and  
2 securely, and I think if we were to do a survey of consumers,  
3 we would find that's what consumers' reasonable expectations  
4 are. In fact, all of the alleged plaintiffs have alleged that  
5 in the complaint. And it isn't just the plaintiffs that expect  
6 the chips in the CPUs to be secure, it's even Intel.

7           These statements that I'm about to read are available  
8 through the link at paragraph 318 in our complaint. But what  
9 Intel says is, "Protecting our customers' data and ensuring the  
10 security of our product are top priorities at Intel. Intel has  
11 a long history of focusing on security. At Intel, security has  
12 been one of our highest priorities. For years we have built  
13 security into every product we create and worked to deliver  
14 breakthrough security technologies."

15           That all indicates that part of the purpose and the  
16 fabric of a CPU is that it's secure.

17           THE COURT: So those statements are not offered as  
18 evidence of an affirmative misrepresentation, but instead as  
19 evidence that the security is part of the central functionality  
20 of the chips?

21           MS. RIVAS: Yes, Your Honor.

22           THE COURT: All right. I understand. I hear you.

23           MS. RIVAS: Now, the AMD case, apart -- Mr. Seeger  
24 kind of went through a few of the distinctions with that case.  
25 But one of the things that I thought, and with all due respect

1 to Judge Koh, that was wrong, when she was considering the  
2 defect, I thought she conflated the defect with the performance  
3 impact of mitigation. The defect, as defense counsel said  
4 earlier, is the defect at the time of purchase. The mitigation  
5 wasn't available at the time of purchase. But the defects --  
6 the two defects, Flaws 1 and 2, were present at the time, and  
7 that is a security -- that is a security risk.

8 THE COURT: I think the plaintiffs have filed another  
9 amended complaint, right?

10 MS. RIVAS: That's correct.

11 THE COURT: Have they specifically articulated in  
12 Hauck v. AMD what the defect is now in their new amended  
13 complaint?

14 MS. RIVAS: I believe they have, Your Honor.

15 THE COURT: What do they say? And then the next  
16 question is going to be: Is that the same as the defect in  
17 this case, or is it different? And if it is different, how do  
18 they differ?

19 MS. RIVAS: Their defect -- I don't know how they  
20 define it in the complaint.

21 THE COURT: I think it is attached to one of  
22 defendant's replies.

23 MS. RIVAS: It's Spectre that's at issue, not  
24 Meltdown and not Foreshadow.

25 THE COURT: So how would you articulate the defect in



1 this case?

2 MS. RIVAS: Technically, giving you the technical  
3 jargon, I would have to explain what's in paragraph 22 -- in my  
4 plain English, when the computer processes are accessing  
5 memory, they leave protected information that could be  
6 available to malicious actors.

7 THE COURT: And you're saying that was not well known  
8 in the industry?

9 MS. RIVAS: The microarchitecture that Intel  
10 employed, no.

11 THE COURT: The defect as you've just articulated it.

12 MS. RIVAS: That's my plain English.

13 THE COURT: Isn't that something that has been known  
14 in the microarchitecture industry for quite a long time?

15 MS. RIVAS: I think people know in the industry that  
16 there are vulnerabilities. But when a company knows of a  
17 specific vulnerability, I don't think that's an excuse to say,  
18 "Well, people know there are vulnerabilities." It is just like  
19 if you -- if someone went to an amusement park and got on a  
20 defective Ferris wheel, and they had signed away that they had  
21 agreed that they assumed all risks, but the company knew of a  
22 particular risk with regard to that Ferris wheel, I don't think  
23 that would absolve the amusement park.

24 THE COURT: No. But wouldn't it show that you  
25 wouldn't be able to satisfy the third LiMandri factor of a

1 defendant having exclusive knowledge of material facts not  
2 known or reasonably accessible to the plaintiff?

3 MS. RIVAS: Your Honor, I think we've been over this,  
4 and I think Mr. Seeger explained it. But only Intel knew about  
5 this particular issue with the unauthorized access from its  
6 program instructions. That's something only Intel knew. It is  
7 something very specific that the public did not know about.

8 THE COURT: Then how did Google Project Zero figure  
9 it out?

10 MS. RIVAS: Google Project -- my understanding, in  
11 basic plain English, is that they figured out the exploits, but  
12 they did not pinpoint it to Intel's microarchitecture.

13 THE COURT: Say that again one more time.

14 MS. RIVAS: Google and the other industry members  
15 figured it out -- figured out the exploits -- but they didn't  
16 pinpoint it to the microarchitecture that we have identified.

17 THE COURT: So the industry figured out what the  
18 vulnerability was and how to exploit it but didn't necessarily  
19 know all of the details of why that vulnerability existed?

20 MS. RIVAS: Exactly.

21 THE COURT: But still, just the existence of that  
22 vulnerability, doesn't that defeat the third LiMandri factor of  
23 the exclusive knowledge and material facts, because when both  
24 you and Mr. Seeger were explaining to the defect, it was this  
25 vulnerability?

1 MS. RIVAS: No, Your Honor. I think there's a  
2 disconnect. I think generally academics and researchers know  
3 that there are vulnerabilities, but their microarchitecture  
4 that led to those vulnerabilities, they don't know about that.

5 THE COURT: Well, I agree with that, but they figured  
6 out the defect. What you're saying Intel should have disclosed  
7 was the existence of the defect. You are not saying that Intel  
8 should have disclosed all of the proprietary details of how  
9 their microarchitecture worked. You're saying they should have  
10 disclosed the defect.

11 MS. RIVAS: Well, the plaintiffs, with consultation  
12 from experts, were able to pinpoint the reason and the  
13 microarchitecture that provided the ability for the exploits to  
14 happen.

15 MR. SEEGER: Can I help on this, Your Honor?

16 THE COURT: Sure.

17 MR. SEEGER: Nobody outside of Intel understood what  
18 we call Flaw 1, the fact that real values are being delivered  
19 to transient instructions. Side-channel attacks have been  
20 known about, you've heard, for years, for decades, and they  
21 operated in various ways.

22 Our allegations -- hopefully the complaint is clear  
23 on this -- basically Intel made it easier for those side  
24 channels to come in and take the information. Flaw 1 is  
25 peculiar to Intel. That wasn't identified -- as far as we

1 know, that was not identified by the Google Project Zero, but  
2 it was a fact that it was the success of the exploits.

3 THE COURT: I thought when it was disclosed, the  
4 Meltdown and Foreshadow vulnerabilities -- who disclosed that?  
5 I thought that came from the Google Project Zero folks. No?

6 MR. SEEGER: I have to correct one thing before I get  
7 the answer from Chris. They never exposed the defect. It was  
8 the success of these exploits.

9 THE COURT: The vulnerability.

10 MR. SEEGER: The vulnerability.

11 (Pause in proceedings.)

12 MR. SEEGER: They disclosed both of them, Meltdown  
13 and Spectre. Foreshadow came later. I want to make sure of  
14 the timing.

15 THE COURT: So the industry figured out and knew the  
16 vulnerability. For a long time they had known about  
17 side-channel vulnerability generally. In 2017, it became  
18 public that there were certain types of vulnerabilities that  
19 might not have been known before. What you are saying is that  
20 within the exclusive knowledge of Intel was how the  
21 microarchitecture worked that allowed that specific  
22 vulnerability.

23 MR. SEEGER: And that makes Meltdown and Foreshadow  
24 successful with them in a way that it doesn't with other chip  
25 manufacturers.

1 THE COURT: Okay.

2 MS. RIVAS: Just to finish up on the implied warranty  
3 of merchantability. Again, we think that Judge Koh, and I say  
4 this with all due respect, that she conflated the defect with  
5 the damages, and she considered whether the 30 percent  
6 performance impact that the plaintiff alleged there, she  
7 considered that to be the defect and then went on to determine  
8 that that basically was de minimis. We think that's a factual  
9 issue, and that that's disputed.

10 THE COURT: What's the factual issue? Whether it is  
11 de minimis or whether the defect is the performance  
12 degradation?

13 MS. RIVAS: Whether it is de minimis.

14 THE COURT: Okay.

15 MS. RIVAS: And she determined it was de minimis.  
16 Then she said -- and this was the gist of it -- this doesn't  
17 render the product unfit for its ordinary purpose of use.

18 So I would like to turn now to the UCL claim. The  
19 UCL claim, in particular the unfair business practices claim.  
20 Whether a practice is unfair is generally a question of fact,  
21 unless the Court can determine on the face of the complaint  
22 that it is not unfair, and the reason for that is because the  
23 Courts employ a balancing test, so to speak, and the test that  
24 they employ is that they determine that a practice isn't fair  
25 if the harm to the consumer from the practice is greater than

1 the utility of the practice. And employing that test requires  
2 a weighing of the evidence that we would obtain through  
3 discovery.

4 My point here is that our unfair business practice  
5 claim is not based on the fraudulent conduct. We have -- in  
6 particular, I have identified certain paragraphs that define  
7 what the unfair business practices are, paragraph 384, "Intel  
8 knowingly designed, developed, manufactured, and sold CPUs with  
9 material defects that result in security risks, compromising  
10 confidential information and a patched slowdown CPU so that  
11 consumers do not receive the benefit of their bargain. Intel  
12 put profits over safety of consumer data by permitting  
13 instruction execution without first performing and enforcing  
14 the appropriate memory access checks as a means to increase  
15 practice or performance." That's also paragraph 384c.

16 "Intel failed to take steps to secure CPU  
17 architecture from cache side-channel attacks." That's  
18 paragraph 384d.

19 So those are the unfair practices that we are  
20 alleging. They are distinct from the fraudulent conduct. So  
21 the claim for unfair business practices does not rise and fall  
22 based on whether the fraud claims succeed or not.

23 Now I would like to move into the unjust enrichment  
24 claim. A quasi-contract unjust enrichment claim for  
25 restitution is obviously recognized under California law

1 THE COURT: As a remedy or as a cause of action?

2 MS. RIVAS: As a cause of action under Astiani.

3 THE COURT: And what are the elements?

4 MS. RIVAS: I have it right here. "To allege unjust  
5 enrichment as an independent cause of action, a plaintiff must  
6 show that the defendant received and unjustly retained a  
7 benefit at the plaintiff's expense." That's cited in the  
8 ESG Capital Partners v. Stratos case. And as you can see,  
9 Your Honor, that doesn't depend on whether the defendant  
10 committed fraud or showing that the defendant committed fraud  
11 or violated some other law.

12 THE COURT: But they must have received it and  
13 retained it unjustly. So what are the elements of receiving  
14 and retaining something unjustly?

15 MS. RIVAS: Well, you'd have to look at the equities  
16 of the case, Your Honor.

17 THE COURT: What are the factors?

18 MS. RIVAS: While the factors consider whether the  
19 defendant did something, maybe it was either an unfair  
20 practice, maybe it was through a mistake, maybe somebody gave  
21 them something by mistake. It's also putting a product out  
22 there that's defective. That could be unjust.

23 I would say that reading -- I went back and read the  
24 claim for unjust enrichment, and it does speak to being based  
25 on fraudulent conduct. I would submit to the Court that, based

1 on the allegations in the complaint, we can state a separate  
2 claim for unjust enrichment that's independent of the fraud,  
3 and I would like to go over some allegations that I think would  
4 support that.

5 "At the expense of security and to gain an advantage  
6 over its rival AMD, Intel knowingly designed CPUs to allow the  
7 unauthorized access of confidential information." That's  
8 paragraphs 2 to 3, 5, 8.

9 "The Meltdown/Foreshadow exploits, due to the  
10 security flaws in the Intel CPUs, are exclusive to Intel."  
11 That's paragraph 315.

12 "The patches Intel has rolled out dramatically reduce  
13 the performance of the CPUs and take away functionality and do  
14 not fix the defects." Those are paragraphs 297, 303 to 314;  
15 306 to 307.

16 "Had plaintiff known that in designing the CPUs Intel  
17 failed to take adequate measures to secure stored data,  
18 plaintiff would not have bought the products contained in  
19 Intel's CPUs or would have paid less for them." That's  
20 paragraph 400.

21 THE COURT: How is that consistent? This is the same  
22 thing I asked Mr. Seeger. I'm having trouble with that. If it  
23 is so bad that a reasonable consumer wouldn't have bought it,  
24 okay, I get that. I'm not going to buy a moldy mattress no  
25 matter how cheap it is. But if your alternative is, "or they



1 would have paid less for it," then it just seems to me, well,  
2 then there's a tradeoff between security and price and security  
3 and price and performance, and they're all different factors,  
4 and so be it.

5 I don't see how it is consistent to say that someone  
6 would either not pay for this had they known the real security  
7 flaw here, or "the defect," as you put it; or maybe they would  
8 have insisted on getting a bigger discount. I don't see how  
9 those are consistent.

10 MS. RIVAS: They are consistent. Well, I don't think  
11 they are inconsistent. I mean, I'm trying to come up with  
12 real-world analogies.

13 Your Honor is obviously struggling with the fact that  
14 people are still using them now that they are patched and that  
15 some people bought them again. I would say that, you know --  
16 again, going back to my analogy, the requirement in the law  
17 isn't that you stop using it, especially if it is patched.

18 The fact that they bought the product again, maybe  
19 they bought it for a different reason. But I think materiality  
20 and reliance and those issues, you just don't have to show that  
21 one factor caused you to rely on buying the product. You could  
22 buy a product for a whole host of reasons. Two may be  
23 material; one may be material. I don't think the fact that  
24 someone bought it again is fatal to these claims.

25 THE COURT: Let me ask you this question, and I'll

1 make this purely hypothetical. I have no idea how Intel makes  
2 its decisions. So whether this is a decision made at product  
3 development or by its board, I don't know.

4 But assume the right decision-makers at Intel are  
5 having a discussion, maybe in 2006, give or take, and they're  
6 exploring what they believe is a theoretical possibility of a  
7 flaw that later turns out to be what we know and refer to as  
8 Meltdown or Foreshadow, and somebody says, "Well, that's just  
9 theoretical. It will take a lot of sophistication and  
10 equipment and technology to be able to possibly exploit it, and  
11 then everything else would have to line up in place, and we  
12 think it is very unlikely it will ever be exploited. And if we  
13 were to totally eliminate that possibility, it would reduce  
14 processing speed."

15 And somebody else says, "And processing speed is one  
16 of the most important things that we have, that we offer, that  
17 our customers really want."

18 And they say, "Okay. We are going to decide on this  
19 balance to go with processing speed over theoretical security  
20 risk."

21 Now, putting aside sort of how they market it and  
22 sort of the deception areas that you've described, is that  
23 decision that they've just made, as I described, unjust, or  
24 would that support a theory of unjust enrichment?

25 MS. RIVAS: I would say that it is unjust, especially

1 when, for example -- just giving you an example -- someone  
2 bought an i7 chip, and it turned into an i5, and they paid more  
3 money for that i7 chip than they did for the i5. That means  
4 that Intel benefited from the overpayment -- from the  
5 payment -- or a consumer paying more for that i7 chip than they  
6 would have.

7 THE COURT: So if you were at this meeting as Intel's  
8 general counsel, and you heard this discussion, "Some people  
9 talk about this vulnerability that can show a potential of  
10 unauthorized access, but your technology experts there say that  
11 they think it is unlikely, a number of things would have to  
12 line up before it can be implemented. It's very unlikely. But  
13 if we do completely eliminate that risk, then that would  
14 adversely affect our processing speed."

15 Somebody else at the meeting says, "And processing  
16 speed is really what helps us differentiate ourselves, and so I  
17 recommend we go with processing speed and accept this security  
18 flaw."

19 You, as the general counsel, would tell them, "No,  
20 you can't do that. That's an unjust decision. You have to err  
21 on the side of eliminating all theoretical possible security  
22 flaws no matter what it does to processing speed"? That's the  
23 advice you would give them.

24 MS. RIVAS: I don't think that's correct, because  
25 they are redesigning the chips now, so they are now willing to

1     compromise speed. So to me, if they are willing to redesign  
2     the chips and compromise speed because of this vulnerability,  
3     then they should have made that decision at the outset.

4             THE COURT: Now, what if they made that decision  
5     before they knew of the proof of concept that the  
6     Google Project Zero team revealed?

7             MS. RIVAS: Well, if they are getting an unfair  
8     advantage, and I'm sure they know what their competitors are  
9     doing or have an idea what their competitors are doing, I think  
10    that's unfair in the market. It's unfair for competition to  
11    gain an advantage over another competitor and to not give  
12    consumers that choice and to not fully inform consumers of  
13    their choice.

14            THE COURT: But now we are back to informing  
15    consumers. You're telling me that they could make that choice  
16    as long as they adequately disclosed that. So the choice  
17    itself isn't an unjust choice. It is the choice coupled with  
18    not giving an adequate disclosure of the choice --

19            MS. RIVAS: If I may go back one step, and then I'll  
20    answer that question. If I was their general counsel, I would  
21    tell them, "You know what, you could do that, but you are going  
22    to be sued, and you are probably going to have to refund or pay  
23    damages." That's what I would tell them.

24            THE COURT: Even if we disclose everything.

25            MS. RIVAS: Now, that's the other issue --

1           THE COURT: I'm trying to isolate the decision. Is  
2 the decision itself an unjust decision, or is it the  
3 combination of making the decision that way but not giving the  
4 disclosure?

5           MS. RIVAS: I think they are independent.

6           THE COURT: And that's why I'm trying to figure out:  
7 Why is the decision independently unjust if there is an  
8 adequate disclosure?

9           MS. RIVAS: I think what you are saying is that the  
10 company has the choice of making the disclosure or not making  
11 the disclosure and just keeping it to themselves.

12           THE COURT: No. I'm saying that you have to balance  
13 security versus performance. How you choose to balance that is  
14 not inherently just or unjust. Where the problem may come in  
15 is if you misrepresent how you balance that, but that's  
16 inconsistent with what you said in the very beginning, how this  
17 idea of how the unjust enrichment theory is different from and  
18 separate from basically the fraud and deception aspect of the  
19 case. That's what I'm trying to understand.

20           MS. RIVAS: Okay. I'm trying to follow Your Honor,  
21 and I apologize if I'm not. It is different than the  
22 disclosure case, because we could have filed this case based  
23 solely on the unjust enrichment claim, and Your Honor would  
24 have analyzed it under the authorities. We didn't have to  
25 bring distinct claims. Just like we brought the implied

1 warranty of merchantability claim, again, that could serve the  
2 basis of the unjust enrichment claim. It is unjust for a  
3 defendant to put a product out there that's not fit for its  
4 ordinary purpose. So you don't need -- you don't need the  
5 fraud part of it or the disclosure part of it.

6           Going back to the disclosure, what would that  
7 disclosure be? I mean, there was dialogue about that, but  
8 there are various things that could have been disclosed. "We  
9 prioritized speed over security. As a result, unlike others,  
10 it's possible for programs to get unauthorized access to secret  
11 information. We don't know whether that's happened. Can't  
12 detect it. However, if we have to patch, you'll experience  
13 material performance loss. If that happens, our chips will  
14 experience about three times more of a performance" -- I mean,  
15 that's just something, you know, that we've thought about, and,  
16 you know, obviously it would depend on how the case goes. And  
17 we would formulate exactly what they knew and exactly what they  
18 should have disclosed. But I think at the outset we state a  
19 claim for that disclosure -- for the nondisclosure  
20 omission-based claims, and we state a claim for unjust  
21 enrichment.

22           THE COURT: Do you know agree that to state a claim  
23 for failure to disclose, a plaintiff must articulate what  
24 should have been disclosed and when it should have been  
25 disclosed?

1 MS. RIVAS: No. I think you have to show there are  
2 material facts that weren't disclosed, and how you articulate  
3 what the disclosure could have been to the consumer, I think  
4 can be refined. But I think we have alleged the material facts  
5 here that should have been disclosed.

6 THE COURT: Okay.

7 MS. RIVAS: That's all I have, Your Honor, unless you  
8 have more questions.

9 THE COURT: Thank you, Ms. Rivas.

10 Anything further from plaintiffs?

11 All right.

12 Rebuttal.

13 MR. KATZ: Your Honor, I think I covered everything  
14 in my presentation this morning. Unless you have any  
15 questions, I don't have anything to add.

16 THE COURT: Okay. Then I would say surrebuttal  
17 within the scope, but that takes care of that. (Laughter.)

18 MR. SEEGER: Here is my surrebuttal: I have nothing  
19 to add.

20 THE COURT: All right. I'm going to take this under  
21 advisement.

22 I do appreciate the outstanding written and oral  
23 advocacy, as always, in this case, and you have given me an  
24 awful lot to think about. The judicial notice motion, that's  
25 gone. The motion to dismiss is taken under advisement. I

1 can't give you a good estimate of when I expect to get you a  
2 decision. I will turn to it responsibly.

3 I will say this, though, and we talked about this at  
4 the end of our technology session. This case will resolve at  
5 the trial court level, either by me dismissing the complaint at  
6 the 12(b)(6) stage or at the Rule 56 stage, or by a jury  
7 decision, or by settlement. It is going to be resolved in one  
8 of those four ways, I think, and I suppose, theoretically, by  
9 some type of standing issue.

10 All right. You'll continue your excellent advocacy  
11 as we go through standing motion to dismiss, summary judgment,  
12 and trial, I'm certain. With respect to a possible settlement,  
13 and I am going to stay out of those discussions as much as I  
14 can, except for occasionally prodding you to have those  
15 discussions. I think it will take an awful lot of creativity  
16 if this case is ever going to settle to figure out how to  
17 settle it.

18 Some cases are easier to see how it can be settled.  
19 Whether both sides are willing to get there, that remains to be  
20 seen, and maybe they do and maybe they don't. If they don't,  
21 it either gets resolved in motion practice or by a jury.

22 This one is not one of those cases, I think. This  
23 one will take a great deal of creativity and thought to even  
24 try to see if there is a possible way or mechanism or structure  
25 of settling this dispute. My guess is that you probably



1 already know that.

2 I will only say that I am really glad that people as  
3 experienced and talented and smart as you all are on both sides  
4 of this case to give that some thought, and all I will do is  
5 occasionally keep prodding you to multitask. As the processors  
6 involved in this case do, you can work on more than one  
7 transaction at the same time.

8 So as I work on the pending motion, as you work on  
9 thinking about discovery, I encourage you also to think about,  
10 if this case could possibly settle, what might a settlement  
11 look like? Then you can figure out, can we ever get there? If  
12 so, fine. If not, fine. But give that some thought. As long  
13 as you are all here, and there is no snow storm on its way, I  
14 encourage you to use this time to speak with each other. But  
15 as with the last time, that's not a court order. It is just  
16 encouragement.

17 Safe travels. The matter is under advisement.

18 (Court adjourned.)  
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I certify, by signing below, that the foregoing is a correct transcript of the record of proceedings in the above-entitled cause. A transcript without an original signature, conformed signature, or digitally signed signature is not certified.

/s/ Dennis W. Apodaca  
DENNIS W. APODACA, RDR, RMR, FCRR, CRR  
Official Court Reporter

March 4, 2019  
DATE

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**MR. KAT:** [1] 43/7  
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